



May 21, 2012

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RECEIVED

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AWMD/WRAP-KNRP

RE: 2012 Annual Site Sampling Report
Sauer-Danfoss Facility – Ames, Iowa

Dear Mr. Aston:

The following letter report constitutes the 2012 Annual Site Sampling Report for the Sauer-Danfoss Company (Sauer-Danfoss) site in Ames, Iowa. Included is a summary of system operation, remedial system monitoring, and annual reporting.

SYSTEM OPERATION

Between January 1, 2011 and December 31, 2011, approximately 2,632,201 gallons were pumped from the collection sump and discharged to the City of Ames, Iowa sanitary sewer. For comparison purposes, approximately 1,723,875 gallons were pumped from the collection sump during 2009, and 3,552,041 gallons were pumped from the collection sump during 2010.

Operational Issues

Remedial system maintenance was conducted on October 27, 2011 by Fehr Graham and Mechanical Comfort, Inc. personnel. No significant repairs or adjustments were recommended based on the maintenance events. A Summary of the maintenance activities is provided in Attachment 1.

Typical trench capture of approximately 40 to 100 feet downgradient of the trench in the vicinity of piezometers PZ-1 and PZ-2, and monitoring well MW-19 has been historically observed, suggesting constituent migration beyond the trench may be captured during normal system operation. Previous analysis of groundwater samples from downgradient monitoring well MW-33 in 2008 and 2009 found levels of tetrachloroethene (TCE) concentrations increasing to above quantitation limits and/or the Maximum Contaminant Level (MCL).



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To further evaluate this trend, monitoring well MW-33 was re-sampled on July 18, 2011. No analytes were detected in the July 2011 MW-33 sample. However, groundwater samples analyzed from MW-19 and MW-33 during the October 2011 annual sampling event show an increase in PCE and several other volatile organic compounds (VOCs). This suggests that, again, the interceptor trench did not hold the plume on-site. Since 2011, much like 2010, was marked by a notable increase in precipitation as compared to 2009. The collection sump discharged approximately twice as much water to the sanitary sewer during 2011 as compared to 2009. Historically during high precipitation events, the remedial system struggles to capture.

Trench capture in the area of monitoring well MW-12 has been less definitive. At MW-12 the groundwater elevation has been measured below the high water level setpoint of the trench. Prior to 2008, analysis of groundwater samples collected from monitoring well MW-12 had shown constituent concentrations below reporting limits, suggesting some level of capture in the vicinity. This trend has been reversing, with an increasing level of constituent concentrations observed at MW-12 from 2008 to 2011. However, in October 2009 groundwater samples could not be collected because the well was dry. The October 2010 annual sampling event showed PCE concentrations of 225 ug/L in addition to several other VOC analytes that were detected above quantitation limits and/or specific MCLs. However, October 2011 testing show results of PCE in concentrations of 7.03 ug/L with other analytes below quantitation limits and MCLs. Monitoring well MW-34 was installed down-gradient of MW-12 to evaluate off-site migration and was found to have a PCR concentration level of 10.7 ug/L during the October 2011 sampling event. MW-34 was re-sampled in December 2011 to confirm the PCE impact, which yielded a result of <1.0 ug/L.

REMEDIAL SYSTEM MONITORING

As required by Sauer-Danfoss facility's Non-Domestic Wastewater Discharge Permit (Permit No. 6593-7) issued by the City of Ames Water and Pollution Control Department (WPCD), samples were collected quarterly from the remedial system discharge and analyzed for select constituents listed in Table 1. Laboratory results are presented in Table 2. A decrease in all analyzed constituents was observed during 4th Quarter 2011 with the exception of MW-11, which had an increase of 1,1-dichloroethene (1,1-DCE), and perchloroethylene (PCE) and MW-10 which had an increased PCE. Copies of the quarterly reports submitted to the City of Ames WPCD are included in Attachment 2.

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Monitoring Well Installation

Monitoring wells MW-R14, MW-29, and PZ-2 were properly abandoned and replaced to facilitate grading for the construction of a test track being installed on the previously vacant south side of the property. In place of these wells, wells MW-R14R, MW-29R and PZ-2R were installed respectively. The installation sites for the three (3) replacement wells are depicted on Figure 1. The original wells are not identified for sampling and analysis in the 1996 Sampling and Analysis Plan (SAP) (revised in October 2003, September 2004, and September 2006), therefore, they are not included in the 2011 Annual Site Sampling Report.

ANNUAL SAMPLING

Groundwater Elevation

Groundwater elevations were measured in on-site monitoring wells during the October 2011 annual sampling event. Groundwater elevations are summarized in Table 3 and Figure 1. The water level in the sump was measured at 940.75 feet Mean Sea Level (MSL). Assuming the groundwater elevation in the collection trench was equal to that measured in the sump, resulting groundwater elevation contours show groundwater flow toward the collection trench throughout the site (see Figure 1).

The sump high water level setpoint is 941.21 feet MSL. During the October 2011 annual sampling event, the groundwater elevation at both monitoring wells MW-19 and MW-20 were above the sump high water level setpoint. Historically, this suggested that impacted groundwater at these monitoring wells was being intercepted by the collection trench. However, analysis of groundwater samples collected since the October 2008 annual sampling event show increasing constituent concentrations above specific MCLs at these locations. One possible explanation is the volume of precipitation received in 2011; it was likely too much for the collection trench pump to handle successfully.

Groundwater Volatile Organic Compound (VOC) Constituents

Annual groundwater sampling was conducted on October 18-19, 2011, in accordance with the 1996 Sampling and Analysis Plan (SAP) (revised in October 2003, September 2004, and September 2006). Monitoring wells MW-10, MW-11, MW-12, MW-R13, MW-18, MW-19, MW-20, MW-R30, MW-31, MW-32, MW-33, and MW-34 were sampled to monitor the performance of the remedial system in providing hydraulic containment of the VOC plume. An additional sampling event was conducted on July 18, 2011 to re-sample monitoring well MW-33, which showed elevated levels of contaminant(s) in the March 2011 sample, per response to the USEPA letter dated March 29, 2011. Groundwater samples were also collected from monitoring wells MW-5 and MW-R6S to develop a conceptual of contaminant conditions upgradient from the well MW-R13.

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The sampling protocol for low-recovery wells detailed in the US Army Corps of Engineers *Revised Standard Operating Procedure for Low-flow Groundwater Purg ing and Sampling*, as incorporated into the SAP, was utilized for monitoring wells exhibiting low groundwater recovery; while the sampling protocol for low-flow sampling specified in the SAP was utilized for the remainder of the selected monitoring wells. The bladder pump intake was positioned at the midpoint of the well screen. Groundwater was directed from the pump discharge tubing into a flow-through cell to track water quality parameters of pH, specific conductance, turbidity, dissolved oxygen (DO), and temperature. Groundwater samples were collected following stabilization of all water quality parameters. Groundwater sampling and final water quality stabilization data is presented in Table 4. Following purging, the pump tubing was disconnected from the flow-through cell, and groundwater samples were collected.

Groundwater samples were analyzed for the constituents listed in Table 1. Results are shown in Table 5, as well as in Figure 2. A comparison of the results from the October 18-19, 2011 and July 18, 2011 sampling events for monitoring wells MW-18, MW-19, and MW-33 can be seen in Figure 3. Laboratory analytical results are provided in Attachment 3. Table 5 compares October 2011 and July 18, 2011 analytical results with respective historical concentrations obtained during the following sampling events:

- September/October 1994 (Harding Lawson Associates, June 1995 Report)
- November 21, 1997 (Montgomery Watson, February 23, 1998, Annual Sampling Report)
- October 20, 1998 (Montgomery Watson, March 1, 1999, Annual Site Sampling Report)
- October 20, 1999 (Montgomery Watson, February 28, 2000, Annual Site Sampling Report)
- November 9, 2000 (Montgomery Watson, March 21, 2001, Annual Site Sampling Report)
- November 6, 2001 (MWH, April 8, 2002, Annual Site Sampling Report)
- October 22, 2002 (MWH, May 5, 2003, Annual Site Sampling Report)
- November 17-19, 2003 (MWH, September 27, 2004, Annual Site Sampling Report)
- November 8-19, 2004 (MWH, May 25, 2005, Annual Site Sampling Report)
- November 14-16, 2005 (MWH, June 28, 2006, Annual Site Sampling Report)
- November 13-17, 2006 (MWH, April 26, 2007, Annual Site Sampling Report)

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- October 8-10, 2007 (MWH, July 31, 2008, Annual Site Sampling Report)
- October 27-31, 2008 (FGA, March 26, 2009, Annual Site Sampling Report)
- October 15, 2009 (FGA, April 5, 2010, Annual Site Sampling Report)
- April 19, 2010 (FGA, based on January 26, 2010 USEPA conference call).
- October 20, 2010 (FGA April 29, 2011, Annual Site Sampling Report)
- March 31, 2011 (FGA April 29, 2011, Annual Site Sampling Report)

A comparative summary of samples collected via low-flow sampling is provided below:

- MW-10: Constituent concentrations in monitoring well MW-10 were generally greater than or similar to those observed in prior years. Concentrations of 1,1-dichloroethene (1,1-DCE); 1,4-dioxane; PCE; 1,1,1-trichloroethane (1,1,1-TCA); and trichloroethene (TCE) remained above their respective MCL/Preliminary Remediation Goal (PRG).
- MW-11: As of October 2010 constituent concentrations in monitoring well MW-11 remained similar to those observed in October 2008. Concentrations of 1,1-DCE; PCE; and TCE remain above their respective MCLs.
- MW-12: Constituent concentrations in monitoring well MW-12 were similar to concentrations observed prior to October 2010 sampling. PCE concentrations remained above the MCL, but decreased to 7.03 ug/L, compared to the higher levels observed in October 2010 (225 ug/L) and April 2010 (12.9 ug/L). The concentrations of 1,1-DCE returned to below laboratory quantitation limits, which was the norm prior to the October 2010 sampling event. Detections of 1,1-dichloroethane (1,1-DCA); 1,1,1-TCA; and TCE were observed above laboratory quantitation limits for the first time in October 2010, but returned to below laboratory quantitation limits in the October 2011 sampling event.
- MW-R13: Constituent concentrations in monitoring well MW-R13 are lower than those observed in October 2010 but are generally similar to concentrations observed in and prior to October 2008. Concentrations of 1,1-DCE; PCE; 1,1,1-TCA; 1,1,2-trichloroethane (1,1,2-TCA); remain above the respective MCL/PRG. Constituents 1,1-DCA; 1,4-dioxane; methylene chloride; TCE; and vinyl chloride had laboratory quantitation limits above their respective MCL/PRG.

- MW-18: Constituent concentrations in monitoring well MW-18 were all below laboratory quantitation limits.
- MW-19: Constituent concentrations in monitoring well MW-19 were lower than those observed in October 2010. Concentrations of 1,4-dioxane; PCE; and are above the respective MCL/PRGs. Concentrations of 1,1-DCA; 1,1-DCE; cis-1,2-dichloroethene (cis-1,2-DCE); 1,1,1-TCA; 1,1,2-TCA; and TCE were lesser than those observed in October 2010, and concentrations remained below their respective MCL.
- MW-20: Constituent concentrations in monitoring well MW-20 were generally similar to those observed in October 2010. Concentrations of 1,4-dioxane; PCE; and TCE remain above their respective MCL/PRG.
- MW-R30: Constituent concentrations in monitoring well MW-R30 are below laboratory quantitation limits, with the exception of cis-1,2-DCE. A decrease below the MCL was observed in PCE and TCE concentrations as compared to October 2010.
- MW-31: Constituent concentrations in monitoring well MW-31 have remained below laboratory quantitation limits, with the exception of PCE. A decrease below the MCL was observed in TCE concentrations as compared to October 2010.
- MW-32: As of October 2011 Constituent concentrations in monitoring well MW-32 have remained below laboratory quantitation limits, with the exception of TCE (2.5 ug/L).
- MW-33: Constituent concentrations in monitoring well MW-33 have decreased compared to October 2010, reducing to 2009 like levels. Other decreases observed to below the laboratory quantitation limits were 1,1-DCE and 1,1,1-TCA. Monitoring well MW-33 was re-sampled on July 18, 2011; constituent concentrations had returned to below laboratory quantitation limits.
- MW-34: Constituent concentrations in monitoring well MW-34 have remained below laboratory quantitation limits with the exception of PCE, which was above its MCL/PRG limits (10.7 ug/L). Monitoring well MW-34 was re-sampled on December 12, 2011; constituent concentrations had returned to below quantitation limits.

Shallow groundwater isoconcentration contour maps and hydrogeologic profiles for VOCs historically and/or currently exceeding MCLs/PRGs (1,1-DCA; 1,2-dichloroethane (1,2-DCA); 1,1-DCE; cis-1,2-DCE; trans-1,2-dichloroethene (trans-1,2-DCE); 1,4-dioxane; methylene chloride; PCE; 1,1,1-TCA; 1,1,2-trichloroethane (1,1,2-TCA); TCE; and vinyl chloride) are provided in Figures 4 through 28.

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Graphs of historical 1,1-DCA; 1,1-DCE; cis-1,2-DCE; 1,4-dioxane; methylene chloride; PCE; 1,1,1-TCA; 1,1,2-TCA; TCE; and vinyl chloride concentrations in monitoring wells historically showing detections above laboratory quantitation limits are provided in Figures 29 through 38. Concentrations of analyzed constituents appear to be remaining generally steady. A decreasing trend is observed for cis-1,2-DCE.

Data Validation

All samples were analyzed for both the constituents specified in the Construction Work Plan and 1,4-dioxane within the EPA Method SW-8260B maximum holding time of 14 days. Samples collected on October 18-19, 2011, were hand delivered by Fehr Graham to the laboratory October 18 and 19, 2011 within three (3) hours of final collection and refrigerated upon receipt. Samples were received at the laboratory at a temperature of 5.8 degrees Celsius; samples were received on ice. It should be noted that the groundwater temperature was between approximately zero (0) and five (5) degrees Celsius during the sampling. Analysis of all trip and equipment blanks indicated constituent concentrations were below laboratory quantitation limits.

A duplicate sample was collected from monitoring well MW-33 and submitted to the laboratory labeled as D01. The Relative Percent Differences (RPDs) between the MW-33 sample and its duplicate was within 15 percent for all constituents. Calculated RPDs are summarized in Table 6. Surrogate compound recovery was within the acceptable range for all samples evaluated. Matrix spike (MS) / matrix spike duplicate (MSD) recovery was within the acceptable range for all sample batches evaluated. The RPDs between MS and MSD samples were within the acceptable levels. The lab control sample (LCS) / lab control sample duplicate (LCSD) recovery were within the acceptable range. The laboratory blank's calibration verification recovery was within the method control limit for all analytes with the exception of acetone in several batches. The LCS for all of these analytes met the acceptance criteria and were used to validate the sample batch. The laboratory blank's percent relative standard deviation (% RSD) for acetone in several batches was above 15%; the average % RSD for all compounds in the calibration met the 15% criteria specified in EPA methods 8260B/8270C.

Samples collected on July 18, 2011, were delivered at the laboratory on July 18, 2011 within three (3) hours of final collection and refrigerated upon receipt. Samples were received at the laboratory at a temperature of 5.5 degrees Celsius; samples were received on ice. Analysis of all trip and equipment blanks indicated constituent concentrations were below laboratory quantitation limits.

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A duplicate sample was collected from monitoring well MW-33 and submitted to the laboratory labeled as MW-33MSD. The RPDs between the MW-33 sample and its duplicate was within 20 percent for all constituents. Calculated RPDs are summarized in Table 6. Surrogate compound recovery was within the acceptable range for all samples evaluated. MS / MSD recovery was within the acceptable range for all samples evaluated and the RPDs between MS and MSD samples were within the acceptable level. The laboratory blank's calibration verification recovery was outside the method control limit for PCE in the trip blank batch. The LCS for PCE met the acceptance criteria and was used to validate the sample batch. The laboratory blank's percent RSD for vinyl chloride in the trip blank batch was above 15%; the average % RSD for all compounds in the calibration met the 15% criteria specified in EPA methods 8260B/8270C.

NEXT STEPS

The current remedial system, the collection trench, has operated approximately 13 years without a significant reduction in contaminant concentrations. Besides on-site remediation, an additional goal of the collection trench was to intercept off-site contaminant migration. However since 2008, larger levels of analyzed constituents have been observed in the area of downgradient monitoring wells MW-12, MW-18, MW-19, and MW-33. The migration downgradient beyond the collection trench indicates contamination has a greater potential to migrate off-site. A Corrective Action Plan Pilot Study (CAPPS) was submitted and approved that included more aggressively addressing the contaminate source area in the region of monitoring well MW-R13. The CAPPS included conducting two in-situ chemical oxidation (ISCO) events using Klozur® activated sodium persulfate by FMC Corporation. In the January 2012 injection event, approximately 18,900 pounds of persulfate, 25,000 pounds of sodium hydroxide activator, and 75,000 pounds of potable water was successfully injected over a 2,500 square foot area. To analyze the effectiveness of the injection event, groundwater samples will be collected from monitoring wells MW-R13, MW-10, and MW-R14R in April 2012 and June 2012. Details of this activity will be provided in a separate submittal.

In the meantime, as required by Permit No. 6593-7, quarterly system sampling will continue, and samples will continue to be analyzed for the select constituents listed in Table 1.

As necessary, the fifteenth (15th) annual sampling event will be conducted during the fourth (4th) quarter of 2012. Groundwater elevations will be measured in all monitoring wells during the scheduled sampling event. Samples will be collected from monitoring wells MW-12, MW-18, MW-19, MW-20, MW-R30, MW-31, MW-33, and MW-34 and analyzed for constituents listed in Table 1. The 2012 Annual Site Sampling Report will be prepared and submitted to the US EPA in or about March 2013.

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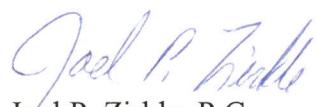
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If you have questions regarding this report, please do not hesitate to call Joel Zirkle at (815) 394-4700.

Best regards,



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cc: Mr. Ken Foltz/Sauer-Danfoss, Inc.-Freeport, IL
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ATTACHMENTS

- Attachment 1 – 2011 Semiannual Remedial System Maintenance Memorandums
- Attachment 2 – 2011 Quarterly Monitoring Reports
- Attachment 3 – Laboratory Report for July 18, 2011
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TABLES

TABLE 1
ANALYTE LIST

Acetone*
1,1-Dichloroethane*
1,2-Dichloroethane
1,1-Dichloroethene*
cis-1,2-Dichloroethene*
trans-1,2-Dichloroethene
1,4 Dioxane**
Methylene Chloride
Tetrachloroethene*
1,1,1-Trichloroethane*
1,1,2-Trichloroethane
Trichloroethene*
Vinyl Chloride***
Total Xylenes*

* Required by Sauer-Danfoss's Permit No. 6593-3.

** Required for select monitoring wells.

*** Beginning second quarter 2002, as requested in the United States Environmental Protection Agency (US EPA) comments on the 2002 Annual Site Sampling Report.

TABLE 2
SAMPLING RESULTS OF REMEDIAL SYSTEM DISCHARGE

Date	Acetone ($\mu\text{g/L}$)	1,1-DCA ($\mu\text{g/L}$)	1,1-DCE ($\mu\text{g/L}$)	cis-1,2-DCE ($\mu\text{g/L}$)	PCE ($\mu\text{g/L}$)	1,1,1-TCA ($\mu\text{g/L}$)	TCE ($\mu\text{g/L}$)	Xylenes ($\mu\text{g/L}$)
Maximum ^a	44	370	170	490	1700	650	110	11
2/22/2011	<5.0	4.7	9.2	35	400	32	15	<1.0
5/23/2011	<5.0	3.2	6.6	20	290	22	11	<1.0
8/30/2011	<5.0	5.1	9.2	40	380	35	14	<1.0
11/29/2011	<5.0	4.8	6.6	34	280	25	12	<1.0

^a

Maximum expected concentrations as provided to the City of Ames Water and Pollution Control Department (WPCD) on July 31, 1996.

$\mu\text{g/L}$	= Micrograms per liter.
1,1-DCA	= 1,1-Dichloroethane.
1,1-DCE	= 1,1-Dichloroethene.
cis-1,2-DCE	= cis-1,2-Dichloroethene.
PCE	= Tetrachloroethene.
1,1,1-TCA	= 1,1,1-Trichloroethane.
TCE	= Trichloroethene.
NA	= Not applicable.

TABLE 3
GROUNDWATER ELEVATIONS

Well No.	Top of Casing	Total Depth	Top of Screen	Initial GW Elevation	GW Elevation 2/4/1997 to 02-06-97	GW Elevation 11/21/1997	GW Elevation 10/20/1998	GW Elevation 10/20/1999	GW Elevation 11/9/2000	GW Elevation 11/6/2001	GW Elevation 10/22/2002	GW Elevation 11/17/2003	GW Elevation 11/9/2004	GW Elevation 11/14/2005	GW Elevation 11/13/2006	GW Elevation 10/8/2007	GW Elevation 10/27/2008	GW Elevation 10/15/2009	GW Elevation 10/20/2010	GW Elevation 10/18/2011
	NGVD Elevation (ft)	NGVD Elevation (ft)	NGVD Elevation (ft)		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
Shallow Wells																				
1	973.71	941.20	951.20	967.40	966.69	967.08	966.30	967.26	967.12	967.36	967.10	967.29	a	a	a	a	a	a	a	
R2S	970.49	949.30	959.30	961.94	962.28	962.79	961.46	963.23	962.05	961.86	962.69	962.31	961.09	962.21	962.34	962.94	962.41	962.05	961.86	
3	969.05	953.90	961.90	963.28	964.01	964.13	962.45	963.88	963.57	963.17	964.15	963.64	a	a	a	a	a	a	a	
4	970.39	953.10	964.10	965.11	965.10	965.18	963.98	965.06	965.01	964.67	965.15	964.89	a	a	a	a	a	a	a	
5	965.82	950.40	960.40	958.03	957.18	957.53	956.19	957.37	957.68	957.07	957.99	957.81	955.99	958.51	958.66	958.30	957.44	958.52	955	
R6S	965.39	946.00	956.00	957.46	956.47	956.97	955.61	956.61	956.85	956.28	956.94	957.26	955.33	957.92	958.30	957.70	956.85	957.89	955.17	
10	964.22	945.70	948.70	955.10	954.36	954.38	953.85	954.23	954.93	954.47	954.46	954.70	953.69	955.57	954.93	955.12	954.12	955.47	953.11	
11	963.26	942.60	945.60	958.06	951.42	951.12	950.89	950.64	951.76	951.62	951.21	951.28	950.86	952.29	951.56	951.67	950.9	952.6	950.42	
12	959.70	936.80	939.80	948.96	938.23	942.24	939.42	938.82	939.56	940.91	940.11	940.51	938.78	939.94	939.19	939.88	938.05	944.11	938.52	
R13	965.67	941.70	951.70	956.85	956.04	955.89	954.17	955.46	957.14	956.40	956.31	956.37	954.58	957.79	957.22	957.68	955.94	957.67	954.52	
R14	965.83	946.10	956.10	954.86	953.04	953.38	953.31	952.07	954.69	954.43	953.07	953.35	952.52	954.93	954.18	955.06	953.28	955.75	952.43	
15	957.99	935.20	938.20	951.98	949.09	949.27	948.22	947.29	950.76	950.62	950.06	949.90	948.77	951.29	950.46	951.52	949.78	951.92	949.07	
16	965.90	943.33	b	954.98	951.80	952.41	952.65	950.17	954.51	954.16	954.39	953.03	951.09	954.51	954.14	955.40	952.96	955.72	951.3	
18	956.73	938.80	941.80	950.34	948.66	948.78	948.28	942.43	948.61	948.82	949.60	949.30	948.03	949.66	949.30	950.67	939.61	948.71	948.09	
19	954.31	936.60	939.60	947.67	944.63	945.43	944.55	943.15	945.04	945.31	944.91	945.54	945.27	945.55	945.80	946.32	945.58	945.59	944.81	
20	956.66	939.40	942.40	950.36	945.88	946.48	944.90	942.83	946.08	947.14	946.42	946.33	945.50	947.54	946.56	947.23	945.88	947.44	945.43	
28	957.17	938.70	941.70	952.54	952.37	952.46	952.21	952.63	952.48	952.30	952.51	952.44	952.18	952.94	952.90	952.06	951.69	952.15	950.13	
29	955.57	941.40	944.40	950.69	949.87	949.95	949.39	950.23	949.90	949.83	950.11	949.71	949.46	950.63	h	h	h	h	h	
31	953.60	936.50	946.50	947.81	946.97	946.99	947.01	947.43	947.37	947.24	946.97	946.85	946.84	946.99	947.12	946.81	946.85	947	945.8	
PZ-1	953.81	927.30	b	948.99	945.59	945.84	944.51	946.08	945.67	945.84	946.41	946.20	946.15	946.93	946.61	946.26	942.95	945.58	941.61	
PZ-2	951.42	925.86	b	947.96	941.42	942.26	940.06	939.27	941.67	942.36	941.89	942.42	941.38	943.61	941.63	943.35	d	939.76		
33	951.67	929.24	939.24	c	c	c	c	c	c	c	c	c	c	943.95	946.52	947.28	947.55	945.97	946.14	943.59
34	951.85	935.25	940.25	j	j	j	j	j	j	j	j	j	j	j	j	j	943.33	942.45		

TABLE 3
GROUNDWATER ELEVATIONS

Well No.	Top of Casing	Total Depth	Top of Screen	Initial GW Elevation 2/4/1997 to 02-06-97	GW Elevation 11/21/1997	GW Elevation 10/20/1998	GW Elevation 10/20/1999	GW Elevation 11/9/2000	GW Elevation 11/6/2001	GW Elevation 10/22/2002	GW Elevation 11/17/2003	GW Elevation 11/9/2004	GW Elevation 11/14/2005	GW Elevation 11/13/2006	GW Elevation 10/8/2007	GW Elevation 10/27/2008	GW Elevation 10/15/2009	GW Elevation 10/20/2010	GW Elevation 10/18/2011
	NGVD Elevation (ft)	NGVD Elevation (ft)	NGVD Elevation (ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
Deep Wells																			
R2D	970.41	928.30	933.30	960.53	961.84	961.73	961.03	961.55	961.47	961.50	961.89	961.62	960.72	961.69	961.56	962.21	961.77	961.58	961.12
R17	965.77	875.60	880.60	944.25	942.79	943.57	943.79	942.17	943.08	943.30	d	942.55	942.26	942.19	943.22	943.14	943.12	943.68	943.1
R30	958.21	902.40	907.40	950.15	947.05	947.73	947.35	947.52	947.71	948.03	947.80	947.78	947.60	948.40	948.04	947.63	945.46	947.18	944.9
32	954.16	897.70	907.70	944.09	942.90	943.08	940.04	943.25	943.23	943.31	943.38	943.19	943.18	943.62	943.49	943.37	941.51	942.42	941.43
Sump and Collection Trench	NA	NA	NA	NA	938.71 ^a	941.23	940.49	939.14	940.73	942.06	939.44	939.05	939.13 ^f	939.20 ^g	939.4	938.92 ^l	937.47	940.43	940.75

Notes:

^a Monitoring well abandoned October 27, 2005.

^b Unknown.

^c Monitoring well installed October 27, 2005.

^d Monitoring well inadvertently overlooked during sampling event.

^e Estimated.

^f Water level measured December 13, 2005.

^g Water level measured November 17, 2006.

^h Inaccessible; monitoring well collapsed.

ⁱ Water level measured October 28, 2008

^j Monitoring well installed September 2, 2010

^k = National Geodetic Vertical Datum.

^l = Groundwater.

^m = Not applicable/available.

ⁿ = Feet.

TABLE 4
GROUNDWATER SAMPLING FINAL STABILIZATION DATA

Monitoring Well	Time Sampled	Depth to Water (ft) ^a	pH ^b	Specific Conductance ^c (mS/cm)	Temperature ^d (°C)	DO (mg/L) ^e	Turbidity (NTU) ^f
MW-10	15:19	11.11	8.32	1.32	11.32	0.23	0.53
MW-12	8:31	21.18	7.76	0.77	8.48	1.48	12.36
MW-R13	14:32	11.15	6.65	13.93	12.75	1.23	86.30
MW-R14	16:07	13.40	8.19	1.03	11.66	0.39	213.00
MW-18	9:06	8.64	7.43	0.93	10.75	0.25	5.99
MW-19	9:37	9.50	7.64	0.74	10.62	2.45	43.30
MW-20	10:08	11.23	7.53	0.812	11.36	0.31	25.10
MW-R30	7:44	13.31	7.20	0.871	8.69	0.45	36.90
MW-31	11:17	7.80	7.35	1.319	13.46	0.40	43.60
MW-33	12:05	8.08	7.70	0.837	13.48	0.12	18.46
MW-34	10:43	9.40	7.41	1.007	11.14	0.20	435.00

Notes:

- ^a Before sampling
- ^b Stabilization criteria: stabilized within +/- 0.1 pH units
- ^c Stabilization criteria: stabilized within +/- 3%
- ^d Stabilization criteria: stabilized within +/- 10%
- ^e Stabilization criteria: stabilized within +/- 0.3 mg/L
- ^f Stabilization criteria: stabilized within +/- 10 NTUs

ft = Feet.

mS/cm = Millisiemens per centimeter.

°C = Degrees Celsius.

DO = Dissolved oxygen.

NTU = Nephelometric Turbidity Unit.

NM = Not measured.

TABLE 5
GROUNDWATER ANALYTICAL RESULTS (µg/L)

Monitoring Well	Date	Acetone	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	Methylene Chloride	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Vinyl Chloride	Total Xylenes	
		MCL ^a	5,500 ^b	810 ^b	5	7	70	100	6.1 ^b	5	200	5	5	2	10	
MW-10	Sep-Oct 1994 ^c	<25	9.6 ^d	<5.0	54	110	<5.0	-	<5.0	1,800	410	<5.0	28	-	<5.0	
	11/21/1997	<20	16.4	<1.0	35.7	135	1.6	-	<10	766	162	<1.0	54.5	-	<3.0	
	10/20/1999	<20	11.3	<1.0	28.5	87.7	<1.0	-	<10	456	118	<1.0	40.4	-	<3.0	
	11/6/2001	<20	10.5	<1.0	22	104	<1.0	-	<5.0	424	120	<1.0	53.2	-	<3.0	
	10/22/2002	<20	11.6	<1.0	23.7	61.1	1.7	-	<5.0	497	174	<1.0	59.8	<1.0	<3.0	
	11/10/2004	<20.0	14.7	<1.00	37.6	49.6	<1.00	12.4	<5.00	625	223	<1.00	42.9	<1.00	<3.00	
	11/15/2006	<10.0	10	<1.00	25.3	53.3	1.07	11	<5.00	385	90.1	<1.00	32.3	<1.00	<3.00	
	11-15-06 ^e	<10.0	10.8	<1.00	23.9	49.7	1	14 ^f	<5.00	372	89.7	<1.00	31.7	<1.00	<3.00	
	10/30/2008 (LF)	<10.0	13.6	<1.00	35.6	32.6	<1.00	12	<5.00	405	188	<1.00	30.9	<1.00	<3.00	
	10-30-08 ^e (LF)	<10.0 ^f	14	<1.00	35.7	35.1	<1.00	15	<5.00	421	194	<1.00	31.5	<1.00	<3.00	
	10/20/2010	<10.0	18.7	<1.00	56.7	25.2	<1.00	21	<5.00	504	307	<1.00	30.7	<1.00	<6.00	
	10/18/2011	<50.0 ^v	16.9	<5.00	45.2	20	<5.00	14	<25.0 ^g	580	294	<5.00	18.4	<5.00 ^g	<15.0 ^g	
MW-11	Sep-Oct 1994 ^c	<25	44	<5.0	130	730	7.1 ^d	-	<5.0	2,500	810	8	91	-	<5.0	
	11/21/1997	<200 ^g	33.9	<10 ^g	57.6	676	<10 ^g	-	<100 ^g	1,460	280	1.8	61.9	-	<30 ^g	
	10/20/1999	<20	20.2	<1.0	25.3	384	2	-	<10	610	121	<1.0	44.8	-	<3.0	
	11/6/2001	<20	14.4	<1.0	18	227	1.7	-	<5.0	811	88.1	<1.0	46.8	-	<3.0	
	11-06-01 ^e	<20	15.1	<1.0	18.2	233	1.8	-	<5.0	585	87.8	<1.0	44.9	-	<3.0	
	10/22/2002	<20	16.5	<1.0	15.6	176	1.4	-	<5.0	551	90.6	<1.0	43.6	<1.0	<3.0	
	11/10/2004	<20	12.8	<1.00	15.4	88.9	1.92	10.4	<5.00	420	134	<1.00	34	<1.00	<3.00	
	11/15/2006	<10.0	14.8	<1.00	23.3	75.7	1.78	12	<5.00	422	165	<1.00	32.6	<1.00	<3.00	
	11-15-06 ^e	<10.0	15.5	<1.00	26.3	79.6	1.73	-	<5.00	426	172	<1.00	35	<1.00	<3.00	
	10/30/2008 (LF)	<50	6.45	<5.00	10.1	35.2	<5.00	5.2	<25.0 ^g	355	90.6	<5.00	18.4	<5.00 ^g	<15.0 ^g	
	10-30-08 ^e (LF)	<10.0 ^f	8.32	<1.00	14.1	37.5	<1.00	-	<5.00	391	131	<1.00	21.5	<1.00	<3.00	
	10/20/2010	<10.0	6.67	<1.00	16.8	31.2	<1.00	5.8	<5.00	469 ^v	106	<1.00	19.8	<1.00	<6.0	
MW-12	Sep-Oct 1994 ^c	<25	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	
	11/21/1997	<10	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0	
	10/20/1998	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0	
	10/20/1999	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0	
	11/9/2000	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0	
	11/6/2001	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0	
	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	11/18/2003	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<3.00	
	11/9/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<3.00	
	11/16/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<3.00	
	11/15/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<3.00	
	10/9/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<3.00	
	10/27/2008 (PD)	<10.0	<1.00	<1.00	<2.00	<1.00 ^g	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00	
	10/27/2008(RP)	-	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	
	10/27/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<2.0	<5.00	12.9	<1.00	<1.00	<1.00	<3.00	
	10/15/2009	"	"	"	"	"	"	"	"	"	"	"	"	"	"	
	4/19/2010	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	-	<2.0	<5.00	13	<5.00	<1.00	<1.00	<2.00	
	10/20/2010	<10.0	2.46	<1.00	19.4	<1.00	<1.00	-	<2.0	<5.00	225 ^v	20.4	<1.00	1.17	<1.00	<6.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	-	<6.0	<5.00	7.03	<1.00	<1.00	<1.00	<3.00	

TABLE 5

GROUNDWATER ANALYTICAL RESULTS (µg/L)

Monitoring Well	Date	Acetone	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	Methylene Chloride	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Vinyl Chloride	Total Xylenes
		5,500 ^b	810 ^b	5	7	70	100	6.1 ^b	5	200	5	5	2	10	
MW-R13	Sep-Oct 1994 ^c	<25	560	5.8	250	200	<5.0	-	9.1 ^d	1,100	970	30	72	-	<5.0
	11/21/1997	<400 ^d	1,980	<20 ^d	1,120	81.2	<20 ^d	-	<200 ^d	1,200	3,140	159	<20	-	<60 ^d
	10-20-99 ^j	<400	2,530	<20	1,510	57.5	<20	-	<200	1,750	3,370	195	<20	-	<60
	11/6/2001	<20	2,020	6.5	1,510	78.8	1.6	-	39	3,040	3,220	238	24.3	-	<3.0
	10/22/2002	<20	3,680	10.3	1,430	71.2	<1.0	-	24.3	3,170	2,140	188	27.4	40.6	<3.0
	11/10/2004	<20.0	1,940	5.84	2,610	101	2.4	124	29.9	4,830	4,790	270	50.6	<1.00	<3.00
	11/14/2006	<231 ^d	2,480	<8.00 ^d	4,650	53	<7.50 ^d	74.6	196 ^d	8,080	6,660	310	40.5 ^d	106	<8.50 ^d
	10/30/2008 (PD)	<1000 ^d	2,740	<100 ^d	5,890	<100 ^d	<100	-	<500 ^d	8,580	7,970	337	<100 ^d	<100 ^d	<300 ^d
	10-30-08 ^e (PD)	<1000 ^{d,r}	2,700	<100 ^d	5,800	<100 ^d	<100	-	<500 ^d	8,020	8,060	346	<100 ^d	<100 ^d	<300 ^d
	10/30/2008 (RP)	-	-	-	-	-	-	78	-	-	-	-	-	-	-
	10-30-08 ^e (RP)	-	-	-	-	-	-	77	-	-	-	-	-	-	-
	10/31/2008 (LF)	<1000 ^d	1,920	<100 ^d	3,460	<100 ^d	<100	110	<500 ^d	5,480	4,720	221	<100 ^d	<100 ^d	<300 ^d
	10/20/2010	<10.0	2860 ^a	<1.0	5110 ^a	40.5	2.37	92	30.5	10300 ^y	6,240	325	45.8	66.4	<6.0
	10/18/2011	<500.0 ^y	2,140	<50.0 ^d	328	<50.0 ^d	<50.0	<120 ^d	<250 ^d	5,990	4,000	144	<50.0 ^d	<50.0 ^d	<150.0 ^d
MW-R14	10/18/2011	<10.0 ^y	11.9	<1.00	20.9	<1.00	<1.00	<6.0	<5.00	234	86.8	<1.00	1.24	<1.00	<3.00
	12/13/2011	<10.0 ^y	5.29	<1.00	9.66	<1.00	<1.00	<6.0	<5.00	3.67	30	<1.00	<1.00	<1.00 ^y	<3.00
	12-13-2011 ^e	<10.0 ^y	4.97	<1.00	9.91	<1.00	<1.00	<6.0	<5.00	3.83	30.5	<1.00	<1.00	<1.00 ^y	<3.00
MW-15	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	2.1	<1.0	<1.0	<1.0	<1.0	<3.0
MW-16	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
MW-18	Sep-Oct 1994 ^c	<25	<5.0 ^d	-	<5.0 ^d	<5.0	<5.0 ^d	<5.0 ^d	<5.0	-	7.7				
	11/21/1997	<10	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/20/1998	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/20/1999	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	11/9/2000	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0
	11/6/2001	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	11/18/2003	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/9/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/15/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/15/2006	<10.0 ^k	<1.00 ^k	<1.00 ^k	<2.00 ^k	<1.00 ^k	<1.00 ^k	<2.0 ^k	22.0 ^k	<1.00 ^k	<1.00 ^k	<1.00 ^k	<1.00 ^k	<1.00 ^k	<3.00 ^k
	10/9/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/29/2008(LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/15/2009	"	"	"	"	"	"	"	"	"	"	"	"	"	"
	10/20/2010	<10.0	3.54	<1.00	29.7	<1.00	<1.00	<2.0	<5.00	309	38	<1.00	1.47	<1.00	<3.00
	3/31/2011	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/19/2011	<10.0 ^y	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00

TABLE 5
GROUNDWATER ANALYTICAL RESULTS ($\mu\text{g/L}$)

Monitoring Well	Date	Acetone	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	Methylene Chloride	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Vinyl Chloride	Total Xylenes
		MCL ^a	5,500 ^b	810 ^b	5	7	70	100	6.1 ^b	5	200	5	5	2	10
MW-19	Sep-Oct 1994 ^c	<25	130	<5.0	140	150	<5.0	-	<5.0	1,600 ^d	900	18	170	-	<5.0
	11/21/1997	<20	77.8	<1.0	13.9	78.1	3.5	-	<10	180	96	5.6	49.4	-	<3.0
	11-21-97 ^e	<20	80.2	<1.0	20.3	79.3	4.1	-	<10	190	120	5.3	52.5	-	<3.0
	10/20/1998	<20	57.2	<1.0	24.5	88.3	2.2	-	<10	206	163	6.6	55.2	-	<3.0
	10/20/1999	<20	58.8	<1.0	43.4	106	2.1	-	<10	374	220	7.1	73.4	-	<3.0
	11/9/2000	<20	35.6	<1.0	10	17.9	<1.0	-	<5.0	213	30.6	<1.0	21.9	-	<3.0
	11/6/2001	<20	9.6	<1.0	7.9	13.2	<1.0	-	<5.0	187	45.4	1	14.8	-	<3.0
	10/22/2002	<20	5.1	<1.0	5	8.9	<1.0	-	<5.0	130	38.9	<1.0	11.2	<1.0	<3.0
	11/18/2003	<20.0	11.7	<1.00	21.9	19.7	<1.00	14.6	<5.00	235	101	1.28	24.3	<1.00	<3.00
	11/9/2004	<20.0	2.8	<1.00	5.77	4.72	<1.00	9.4	<5.00	129	26.3	<1.00	9.23	<1.00	<3.00
	11-09-04 ^e	<20.0	2.7	<1.00	5.41	4.77	<1.00	9.8	<5.00	122	26.2	<1.00	9.75	<1.00	<3.00
	11/16/2005	<20.0	2.15	<1.00	3.45	3.19	<1.00	<6	<5.00	76.4	15.4	<1.00	4.76	<1.00	<3.00
	11-16-05 ^e	<20.0	2.33	<1.00	3.69	3.24	<1.00	<6	<5.00	73.4	15.3	<1.00	4.76	<1.00	<3.00
	11/17/2006	<10.0	5.97	<1.00	9.85	7.41	<1.00	17	<5.00	124	32.7	<1.00	8.75	<1.00	<3.00
	10/10/2007	<10.0	<1.00	<1.00	6.31	1.98	<1.00	5	<5.00	64.5	2.66	<1.00	3.52	<1.00	<3.00
	10/10/2007	<10.0	<1.00	<1.00	6.49	1.75	<1.00	5.1	<5.00	67.2	2.46	<1.00	3.37	<1.00	<3.00
	10/29/2008(LF)	<10.0	1.12	<1.00	2.05	1.27	<1.00	<2.0	<5.00	40	7.66	<1.00	1.9	<1.00	<3.00
	10/15/2009	<10.0	1.6	<1.00	<2.00	3.41	<1.00	3.5	<5.00	38	6.83	<1.00	3.64	<1.00	<4.00
	10-15-09 ^e	<10.0	1.56	<1.00	2.2	3.72	<1.00	3.1	<5.00	38.2	6.71	<1.00	4.06	<1.00	<4.00
	10/20/2010	<10.0	25.2	<1.00	44	13.6	<1.00	22	<5.00	432 ^v	64.9	1.02	14.4	<1.00	<6.00
	10-20-2010 ^e	<10.0	22.2	<1.00	40.3	11.1	<1.00	27	<5.00	399 ^v	59.5	<1.00	12.4	<1.00	<6.00
	3/31/2011	<10.0	4.94	<1.00	6.21	4.67	<1.00	12	<5.00	69.7	18	<1.00	5.18	<1.00	<3.00
	10/19/2011	<10.0 ^y	3.84	<1.00	4.19	3.09	<1.00	<12 ^g	<5.00	50.5	13.4	<1.00	4.14	<1.00	<3.00
	10-19-2011 ^e	<10.0 ^y	3.38	<1.00	3.95	2.69	<1.00	7	<5.00	49.9	12.2	<1.00	3.5	<1.00	<3.00
MW-20	Sep-Oct 1994 ^c	<25	70	<5.0	110	90	<5.0	-	<5.0	1,800	760	20	26	-	<5.0
	11/21/1997	<200 ^g	130	<10 ^g	70	230	<10 ^g	-	<100 ^g	1,020	316	14.4	38.2	-	<30 ^g
	10/20/1998	<20	77.6	<1.0	61.2	221	4.6	-	<10	1,450	304	11.4	51.2	-	<3.0
	10-20-98 ^e	<20	68.8	<1.0	73.4	219	3.2	-	<10	1,490	307	11.7	50.9	-	<3.0
	10/20/1999	<40	58.9	<2.0	47.5	148	<2.0	-	<20	957	192	7.8	34.7	-	<6.0
	10-20-99 ^e	<20	68.3	<1.0	57.7	168	1.8	-	<10	1,200	233	8.1	42.2	-	<3.0
	11/9/2000	<20	74.1	<1.0	54.2	275	6.6	-	<5.0	915	222	7.1	48.6	-	<3.0
	11/6/2001	<20	49.2	<1.0	17.1	279	3.2	-	<5.0	848	102	6.5	35.8	-	<15
	10/22/2002	<20	43.3	<1.0	33	182	3.2	-	<5.0	1,330	168	6.3	46.8	<1.0	<3.0
	10-22-02 ^e	<20	33	<1.0	47.7	182	2.3	-	<5.0	1,250	216	5.9	56.4	<1.0	<3.0
	11/19/2003	<20.0	57.4	<1.00	45.9	158	3.9	32.5	<5.00	1,080	143	4.85	39.8	<1.00	<3.00
	11-19-03 ^e	<20.0	64.9	<1.00	57.3	176	4.03	43.8	<5.00	1,090	166	5.02	45.7	<1.00	<3.00
	11/10/2004	<20.0	47.9	<1.00	40.5	124	4.45	90.9	<5.00	590	121	3.84	31.7	<1.00	<3.00
	11/16/2005	<20.0	47.7	<1.00	50.6	140	3.4	<30	<5.00	967	163	3.57	42.5	<1.00	<3.00
	11/17/2006	<10.0	41.1	<1.00	36.2	107	6.39	83	<5.00	642	102	3.1	30.4	1.81	<3.00
	10/10/2007	<10.0	27.2	<1.00	62.8	90.4	5.39	66	<5.00	582	45.3	2.69	29.3	2.96	<3.00
	10/30/2008 (PD)	<50.0	15.8	<5.00	10.6	41.4	<5.00	-	<25 ^g	88.8	25.9	<5.00	8.7	<5.00 ^g	<15.0 ^g
	10/30/08 (LF)	-	-	-	-	-	-	64	-	-	-	-	-	-	-
	10/15/2009	<10.0	27.6	<5.00	25.3	71.6	<5.00	54	<25 ^g	535	65.8	<5.00	23.2	<5.00 ^g	<15.0 ^g
	10/20/2010	<10.0	38.2	<1.00	89.6	55.8	2.98	42	<5.00	719 ^v	137	2.52	22.4	<1.00	<6.00
	10/19/2011	<100 ^y	15	<10.0 ^g	<20.0 ^g	34.9	<10.0	34	<50.0 ^g	452	55.8	<10.0 ^g	16.4	<10.0 ^g	<30.0 ^g

TABLE 5
GROUNDWATER ANALYTICAL RESULTS ($\mu\text{g/L}$)

Monitoring Well	Date	Acetone	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	Methylene Chloride	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Vinyl Chloride	Total Xylenes
		5,500 ^b	810 ^b	5	7	70	100	6.1 ^b	5	5	200	5	5	2	10
MCL^a															
MW-29	10/22/2002	<20	<1.0	<1.0	<2.0	3.5	<1.0	-	<5.0	6.1	1.1	<1.0	4.3	<1.0	<3.0
MW-R30	10/22/2002	<20	<1.0	<1.0	<2.0	2.8	<1.0	-	<5.0	1.4	<1.0	<1.0	<1.0	<1.0	<3.0
	11/17/2003	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/9/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/15/2005	<20.0	<1.00	<1.00	<2.00	1.47	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/14/2006	<10.0	<1.00	<2.00	<1.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/9/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/29/2008 (PD)	<10.0 ^d	<1.00	<1.00	<2.00	2.06	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/29/2008 (LF)	<10.0 ^d	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	10.2	<1.00	<1.00	<1.00	<1.00	<3.00
	10/15/2009	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	63.6	3.07	<1.00	37.6 ^d	<1.00	<4.00
	10/20/2010	<10.0	<1.00 ^g	<1.00	<2.00 ^g	29.4 ^g	<1.00	-	<5.00	3.83 ^g	<5.00	<1.00	74.8	<1.00 ^g	<6.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	91.4	<1.00	-	<5.00	<1.00	<1.00	<1.00	3.04	<1.00	<3.00
MW-31	Sep-Oct 1994 ^c	<25	<5.0	<5.0	<5.0	8.3	<5.0	-	<5.0	36	25	<5.0	19	-	<5.0
	11/21/1997	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/20/1998	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/20/1999	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	11/9/2000	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0
	11/6/2001	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	11/17/2003	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/8/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/16/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/13/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/8/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/27/2008 (PD)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/27/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	11.3	<1.00	<1.00	<1.00	<1.00	<3.00
	10/15/2009	<10.0	<1.00	<1.00	<2.00 ^g	<1.00	<1.00	-	<5.00	5.72	<1.00	<1.00	<1.00	<1.00	<4.00
	10/20/2010	<10.0	<1.00 ^g	<1.00	<2.00 ^g	<1.00 ^g	<1.00	-	<5.00	2.04 ^g	<5.00	<1.00	2.21	<1.00 ^g	<6.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	11.8	<1.00	<1.00	<1.00	<1.00	<3.00
MW-32	Sep-Oct 1994 ^c	<25	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0	<5.0	<5.0	<5.0	<5.0	-	<5.0
	11/21/1997	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	220	<1.0	<1.0	<1.0	-	<3.0
	10/20/1999	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	11/6/2001	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	1.9 ^m	<1.0	<1.0	<1.0	-	<3.0
	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	11/8/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/14/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/28/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/20/2010	<10.0	<1.00 ^g	<1.00	<2.00 ^g	<1.00 ^g	<1.00	-	<5.00	<1.00 ^v	<5.00	<1.00	2.5	<1.00 ^g	<6.00

TABLE 5
GROUNDWATER ANALYTICAL RESULTS ($\mu\text{g/L}$)

Monitoring Well	Date	Acetone	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	Methylene Chloride	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Vinyl Chloride	Total Xylenes
		5,500 ^b	810 ^b	5	7	70	100	6.1 ^b	5	5	200	5	5	2	10
MW-33	11/15/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/13/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<5.19	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/8/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/28/2008 (PD)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/28/2008 (RP)	-	-	-	-	-	-	<2.0	-	-	-	-	-	-	-
	10/28/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00 ^a	<2.0	<5.00	19.9	<1.00	<1.00	<1.00	<1.00	<3.00
	10/15/2009	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	3.18	<1.00	<1.00	<1.00	<1.00	<4.00
	4/19/2010	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<5.00	<1.00	<1.00	<2.00	<3.00
	10/20/2010	<10.0	<1.00	<1.00	2.75	<1.00	<1.00	<2.0	<5.00	54.6	3.95	<1.00	<1.00	<1.00	<3.00
	3/31/2011	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	3-31-2011*	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	7/19/2011	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	3.55	<1.00	<1.00	<1.00	<1.00	<3.00
MW-34	10/20/2010	<10.0	<1.00 ^a	<1.00	<2.00 ^a	<1.00 ^a	<1.00	<2.0	<5.00	<1.00 ^v	<5.00	<1.00	<1.00	<1.00 ^a	<6.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	10.7	<1.00	<1.00	<1.00	<1.00	<3.00
	12/12/2011	<10.0 ^t	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00 ^v	<3.00
Trip Blank	11/21/1997	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	1.2 ^a	<1.0	<1.0	<1.0	-	<3.0
	10/20/1998	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<10	<1.0	<1.0	<1.0	<1.0	-	<3.0
	11/6/2001	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	-	<3.0
	10/22/2002	<20	<1.0	<1.0	<2.0	<1.0	<1.0	-	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	11/8/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/10/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/15/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/16/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/13/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<5.19	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/13/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/13/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/8/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/10/2008 ^b	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/27/2008	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00 ^a	<2.0	10.7 [*]	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/29/2008	<10.0 ^t	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	9.81 [*]	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	4/19/2010	<10.0 ^t	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<5.00	<1.00	<1.00	<2.00	<3.00
	10/20/2010	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00 ^v	<5.00	<1.00	<1.00	<1.00	<3.00
	3/31/2011	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00 ^a	<1.00	<1.00	<1.00	<1.00 ^v	<3.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00

TABLE 5
GROUNDWATER ANALYTICAL RESULTS ($\mu\text{g/L}$)

Monitoring Well	Date	Acetone	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,4-Dioxane	Methylene Chloride	PCE	1,1,1-TCA	1,1,2-TCA	TCE	Vinyl Chloride	Total Xylenes
		5,500 ^b	810 ^b	5	7	70	100	6.1 ^b	5	5	200	5	5	2	10
Equipment	11/18/2003	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
Blank	11/8/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/9/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/10/2004	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	12.9	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/15/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/16/2005	<20.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/13/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<5.19	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/14/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<5.19	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/15/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<5.19	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	11/17/2006	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/8/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	1.05	<1.00	<1.00	<1.00	<1.00	<3.00
	10/9/2007	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/10/2008 ^a (PD)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	-	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/10/2008 ^a (RP)	-	-	-	-	-	-	<2.0	--	-	-	-	-	-	-
	10/27/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/28/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/29/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/30/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/31/2008 (LF)	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/15/2009	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<4.00
	10/15/2009	<10.0	<10.0	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<4.00
	10/20/2010	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/20/2010	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<2.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<6.00
	3/31/2011	<10.0	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00
	10/19/2011	<10.0 ^v	<1.00	<1.00	<2.00	<1.00	<1.00	<6.0	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<3.00

Notes:

- ^a Bold data values are above MCL.
- ^b Region 9 Preliminary Remediation Goal.
- ^c Harding Lawson Associates.
- ^d Estimated result.
- ^e Duplicate.
- ^f Analyte detected in associated method blank. Sample rerun, but past holding time.
- ^g Detection limited by laboratory dilution ratio.
- ^h Only one duplicate required for 1,4-dioxane samples.
- ⁱ Reporting limit elevated due to matrix interferences.
- ^j Estimated quantitation limit.
- ^k Holding time exceedance.
- ^l Analysis not required per November 2, 2005, e-mail correspondence from Spencer Dulaney of United States Environmental Protection Agency (USEPA) to James Aycock of USEPA.
- ^m Possible carryover from previous sample at laboratory.
- ⁿ Suspected to be carryover from sample analyzed immediately prior.
- ^o Not analyzed.
- ^p Collected during initial installation of PD and RP samplers.
- ^q Calibration verification recovery outside the method control limits.
- ^r Laboratory control sample was outside acceptance criteria.
- ^s Common lab contaminant.
- ^t MS/MSD were outside control limits.
- ^u Not enough water volume in well to sample.
- ^v The % RSD for this compound was above 15%.

$\mu\text{g/L}$	= Micrograms per liter.
1,1-DCA	= 1,1-Dichloroethane.
1,2-DCA	= 1,2-Dichloroethane.
1,1-DCE	= 1,1-Dichloroethene.
cis-1,2-DCE	= cis-1,2-Dichloroethene.
trans-1,2-DCE	= trans-1,2-Dichloroethene.
PCE	= Tetrachloroethene.
1,1,1-TCA	= 1,1,1-Trichloroethane.
1,1,2-TCA	= 1,1,2-Trichloroethane.
TCE	= Trichloroethene.
MCL	= Maximum contaminant level.
LF	= Low-flow sampling method
PD	= Polyethylene diffusion bag sampler
RP	= Rigid porous polyethylene sampler

TABLE 6
RELATIVE PRECENT DIFFERENCES

**CONSTITUENT CONCENTRATIONS IN MW-19 AND RESPECTIVE DUPLICATE
10/19/2011 SAMPLING EVENT**

Analyte	MW-19 ($\mu\text{g/L}$)	Duplicate ($\mu\text{g/L}$)	RPD (%)
Acetone	<10.0	<10.0	N/A
1,1-Dichloroethane	3.84	3.38	13
1,2-Dichloroethane	<1.00	<1.00	N/A
1,1-Dichloroethene	4.19	3.95	6
cis-1,2-Dichloroethene	3.09	2.69	14
trans-1,2-Dichloroethene	<1.00	<1.00	N/A
1,4-Dioxane *	12	7	53
Methylene Chloride	<5.0	<5.0	N/A
Tetrachloroethene	50.5	49.9	1
1,1,1-Trichloroethane	13.4	12.2	9
1,1,2-Trichloroethane*	<1.00	<1.00	N/A
Trichloroethene	4.14	3.5	17
Vinyl Chloride	<1.00	<1.00	N/A
Total Xylenes	<3.00	<3.00	N/A

Notes:

RPD Actual value for Sample is <12.00
 ($\mu\text{g/L}$) = Relative percent difference.
 NA = Micrograms per liter.
 % = Not applicable.
 * = Percent.

FIGURES

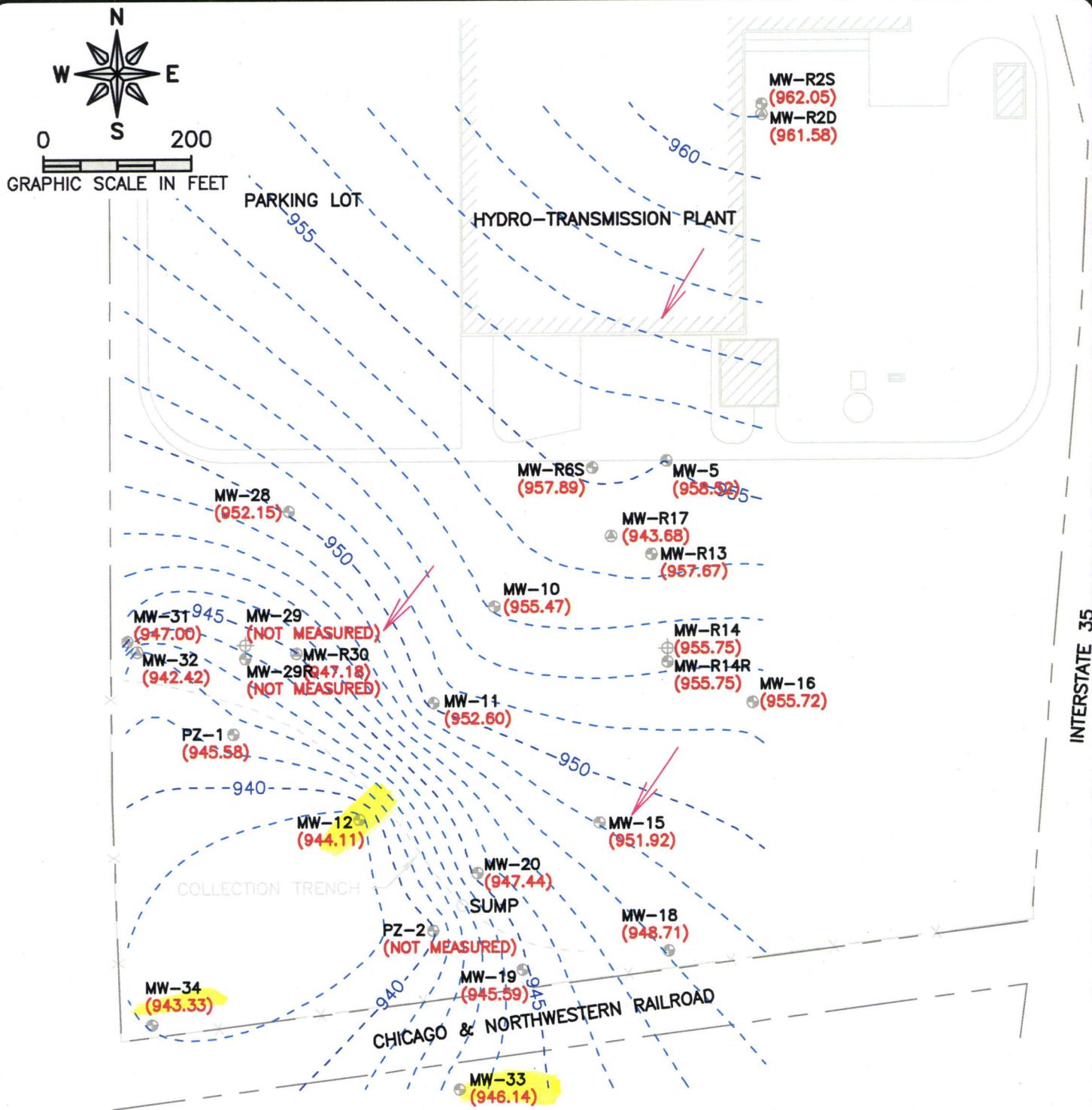


FIGURE 1
SHALLOW GROUNDWATER FLOW
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

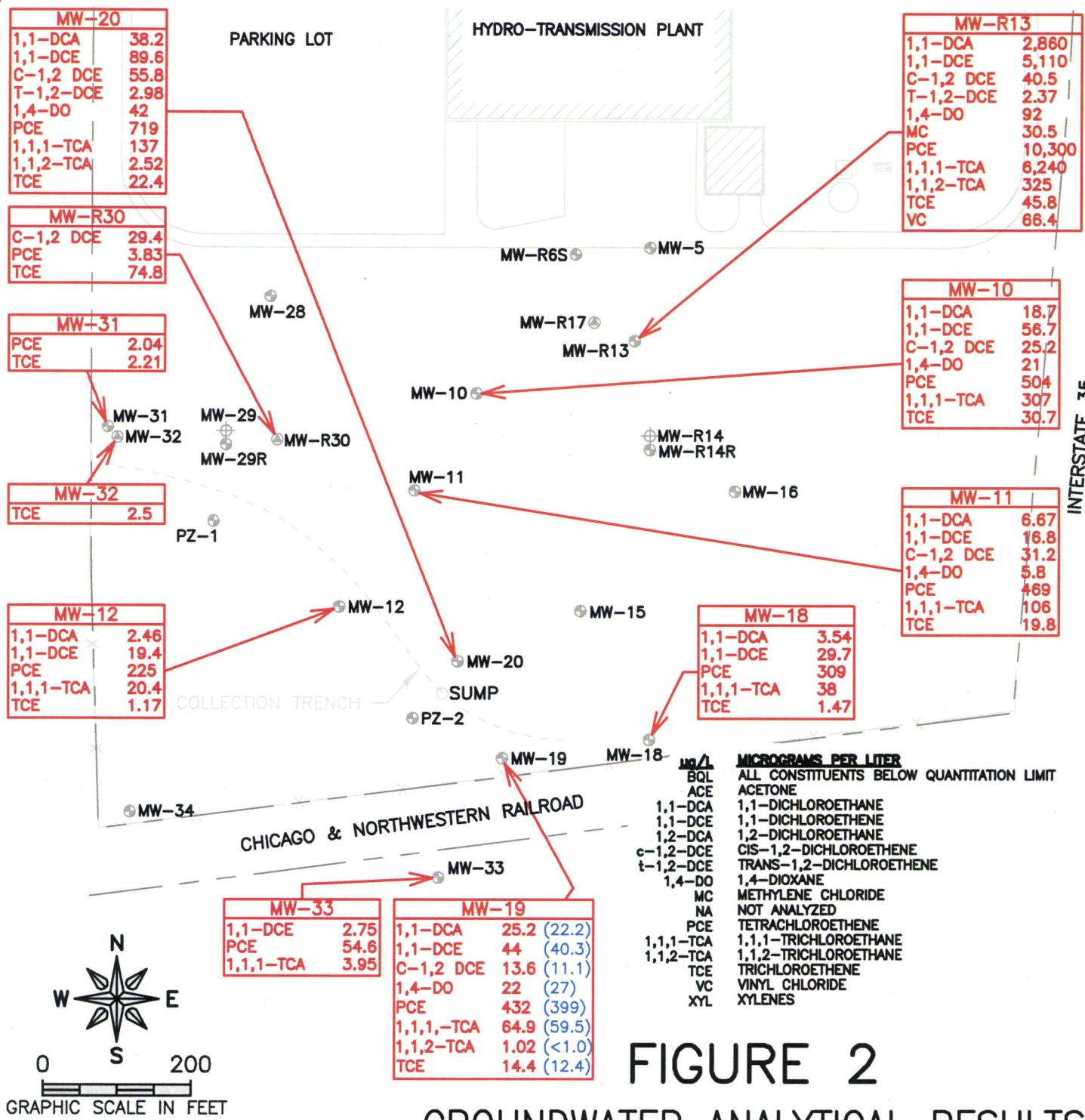


FIGURE 2
GROUNDWATER ANALYTICAL RESULTS
ABOVE QUANTITATION LIMIT
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

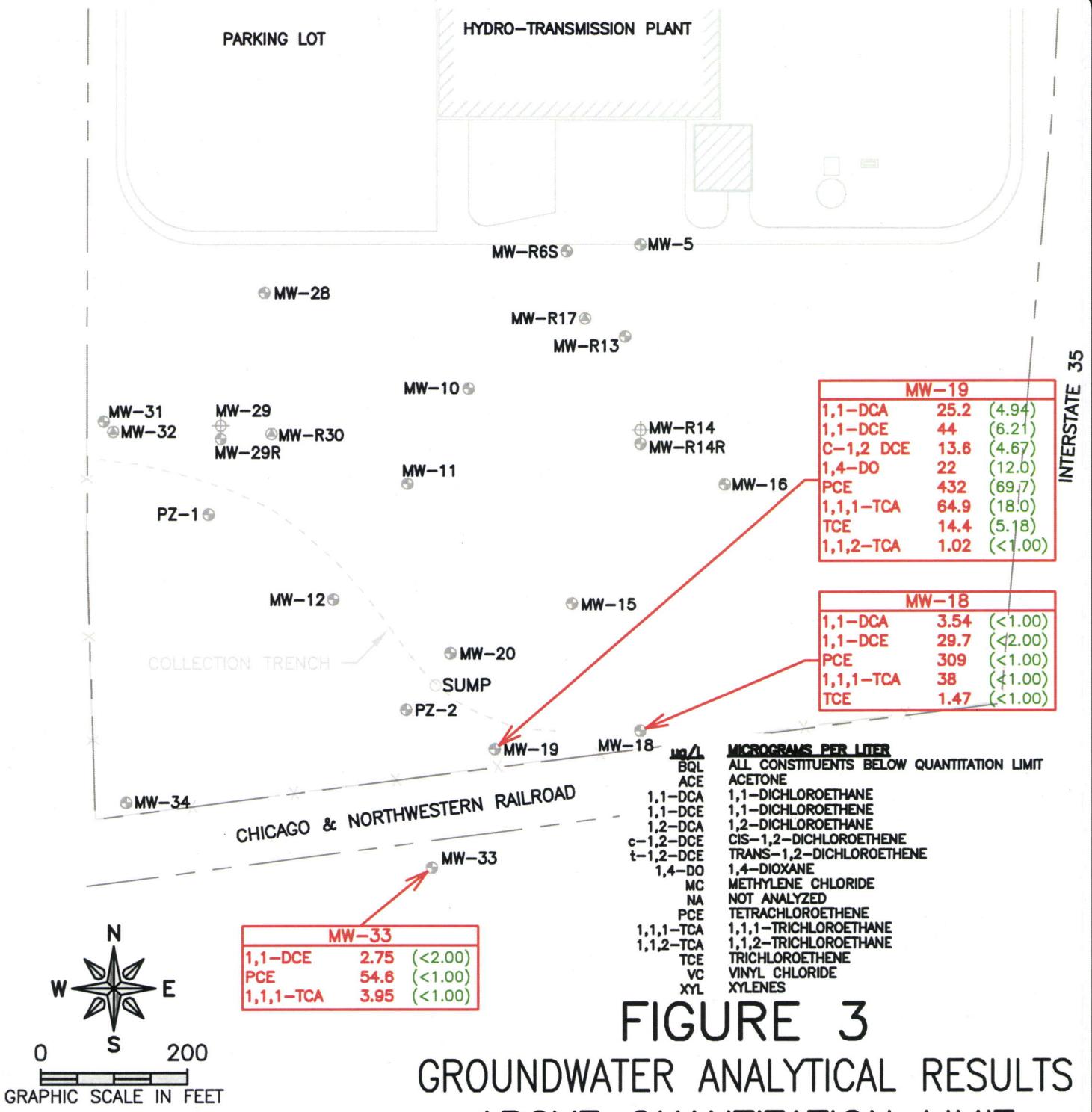


FIGURE 3
GROUNDWATER ANALYTICAL RESULTS
ABOVE QUANTITATION LIMIT
COMPARISON OF OCTOBER 19, 2011,
JULY 19, 2011 AND DECEMBER 12, 2011
SAMPLING EVENTS
SAUER-DANFOSS FACILITY AMES, IOWA
4/23/12



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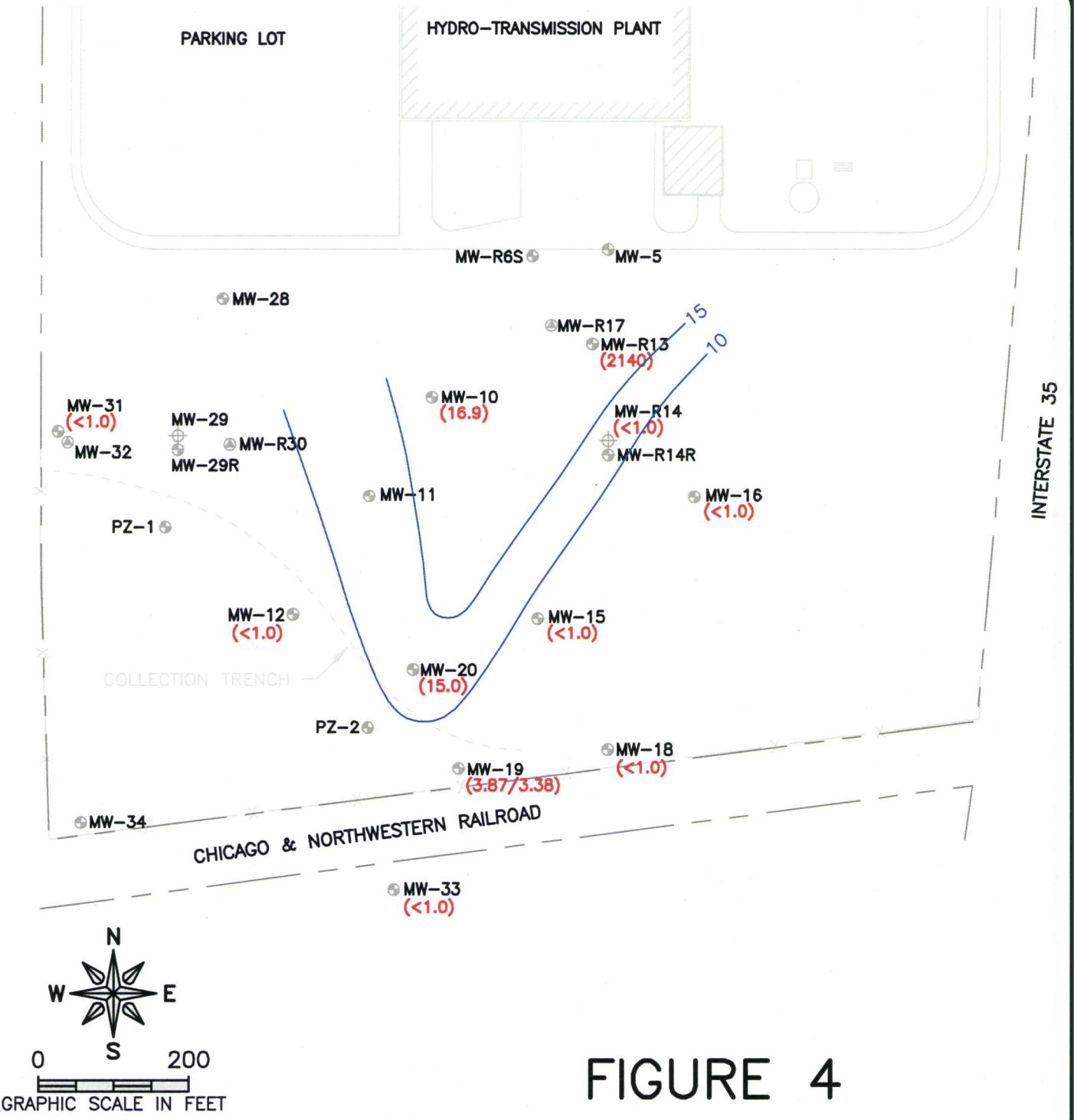


FIGURE 4
SHALLOW GROUNDWATER
1,1-DICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

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INTERSTATE 35

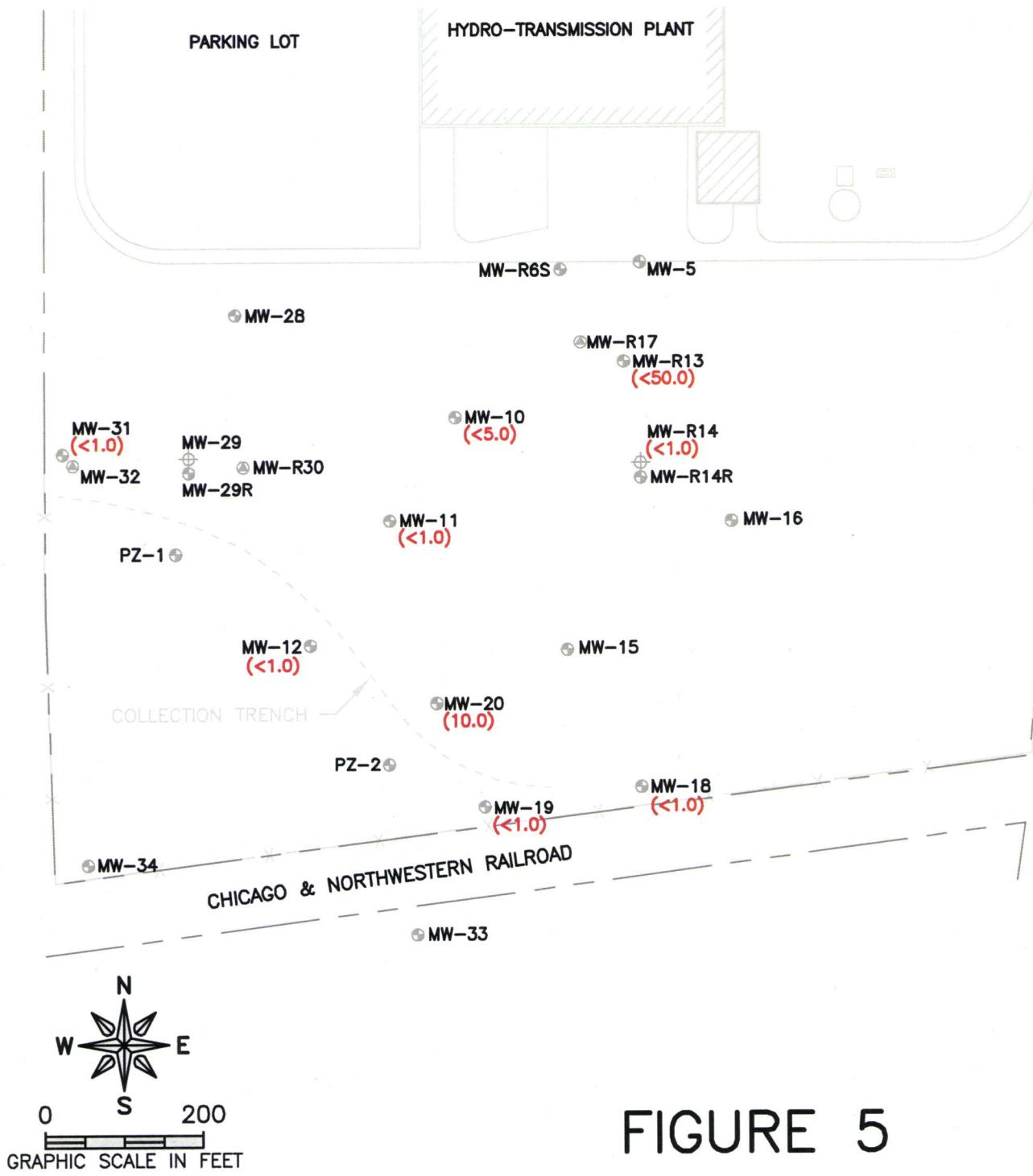


FIGURE 5
SHALLOW GROUNDWATER
1,2-DICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

LEGEND

- SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- (27.2) 1,2-DICHLOROETHANE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L

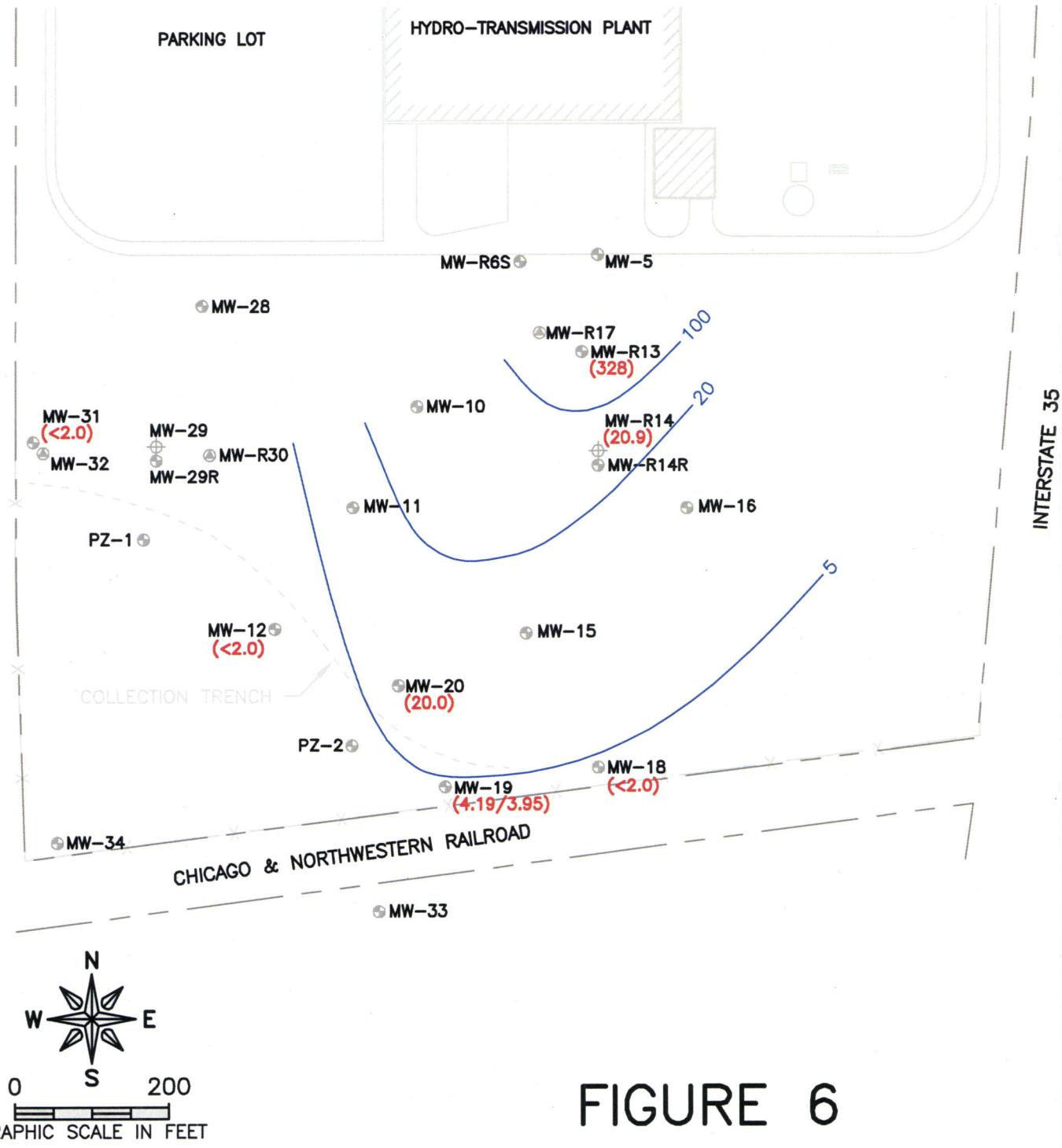


FIGURE 6
SHALLOW GROUNDWATER
1,1-DICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

LEGEND

- SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- (27.2) 1,1-DICHLOROETHENE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L
- ~(20) ISO-CONCENTRATION CONTOUR

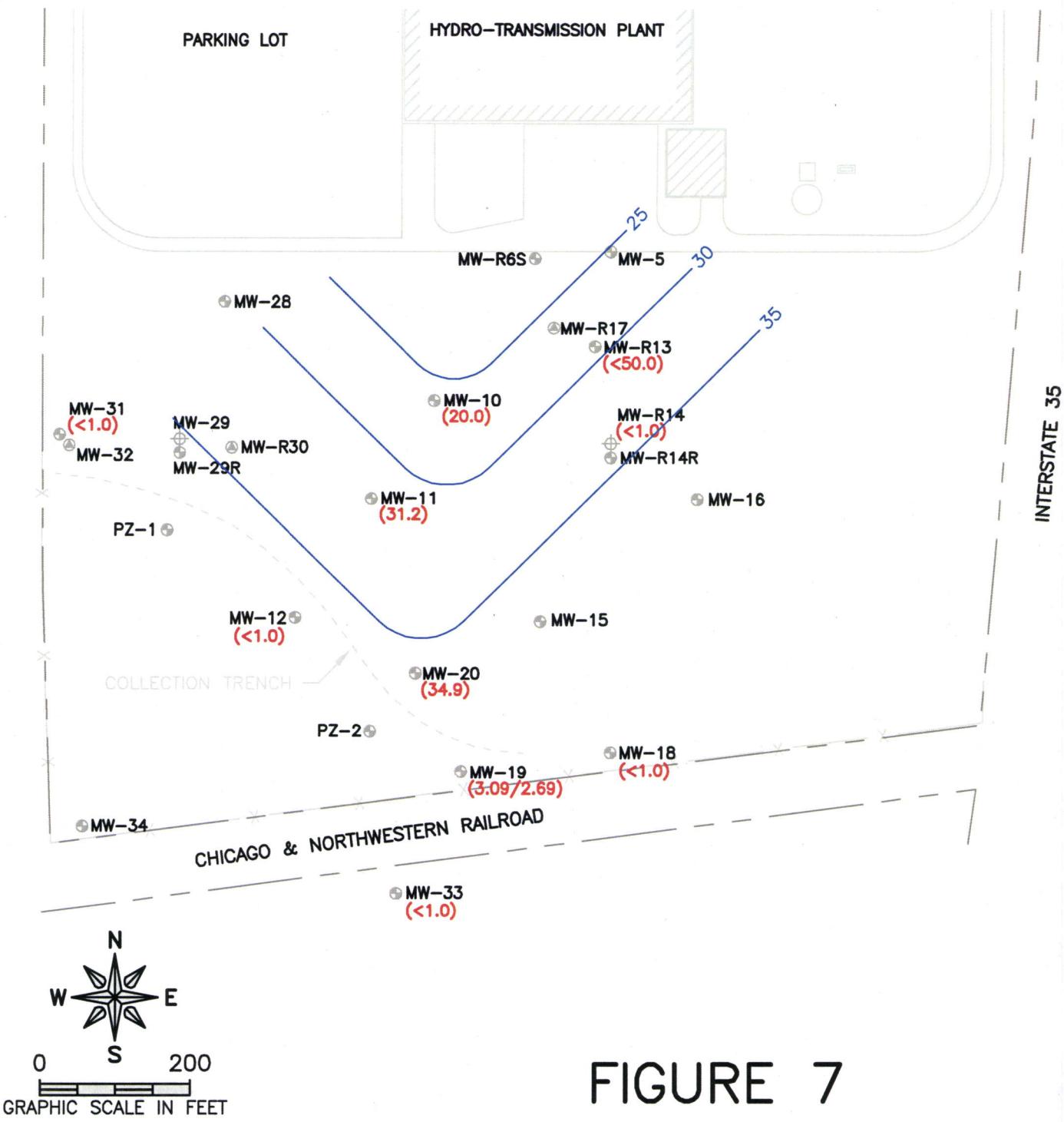


FIGURE 7
SHALLOW GROUNDWATER
CIS-1,2-DICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

LEGEND

- ⊕ SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- ◎ DEEP MONITORING WELL
- (27.2) CIS-1,2-DICHLOROETHENE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN $\mu\text{g/L}$
- ~ ISO-CONCENTRATION CONTOUR

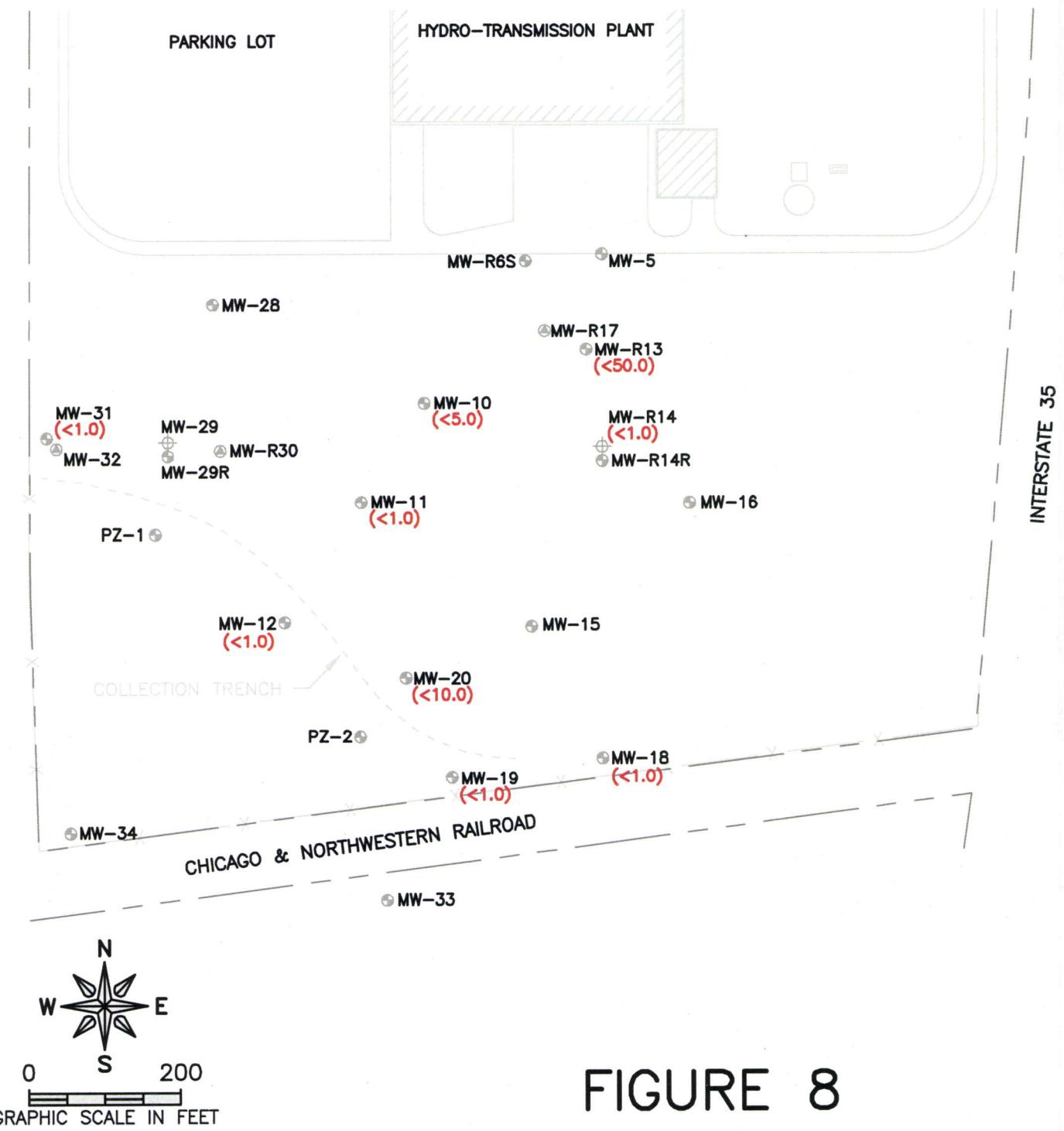


FIGURE 8
SHALLOW GROUNDWATER
TRANS-1,2-DICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

LEGEND

- ⊕ SHALLOW MONITORING WELL (ABANDONED)
- ◎ SHALLOW MONITORING WELL
- Ⓐ DEEP MONITORING WELL
- (27.2) TRANS-1,2-DICHLOROETHENE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L
- ~~~~ ISO-CONCENTRATION CONTOUR

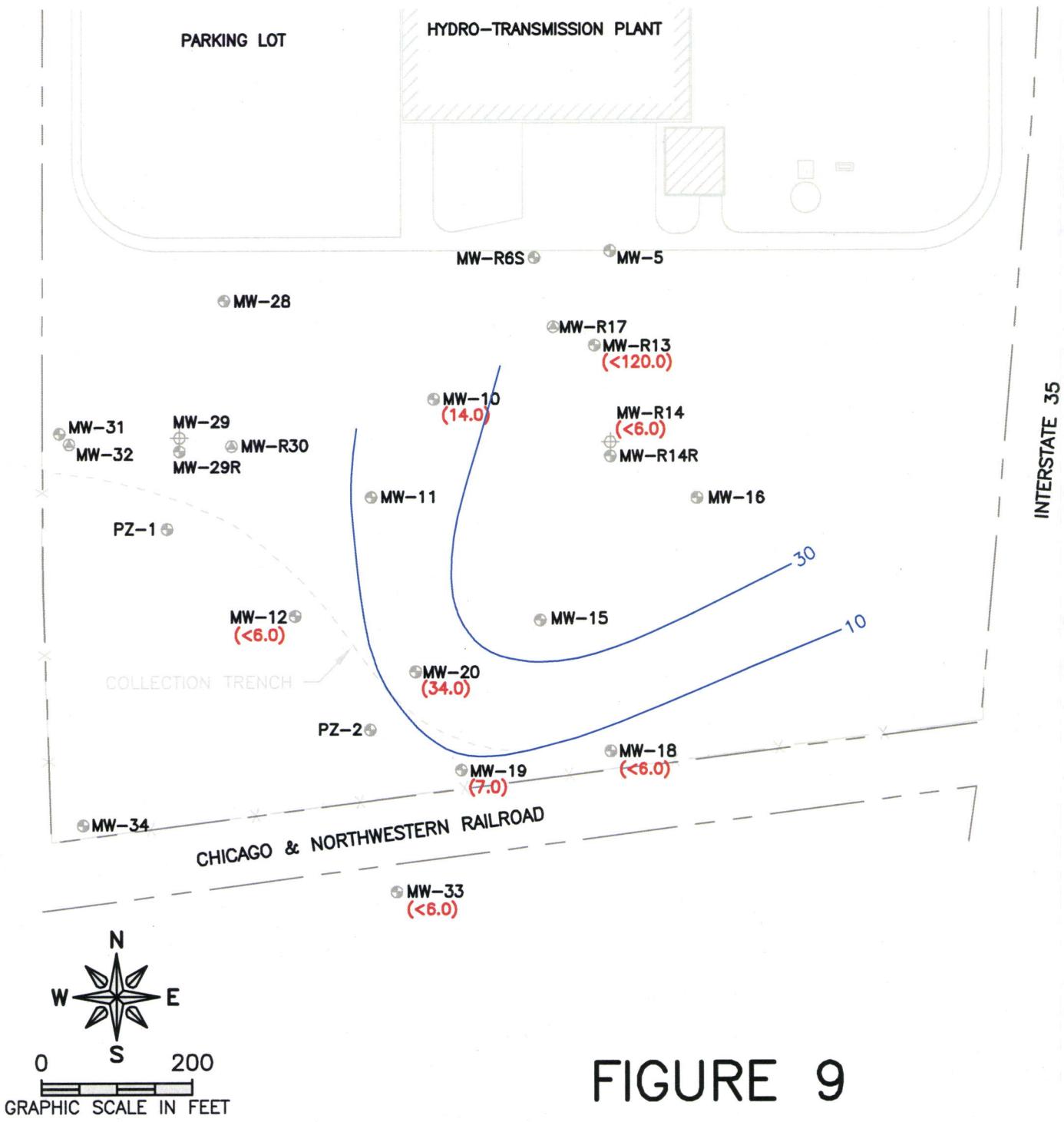
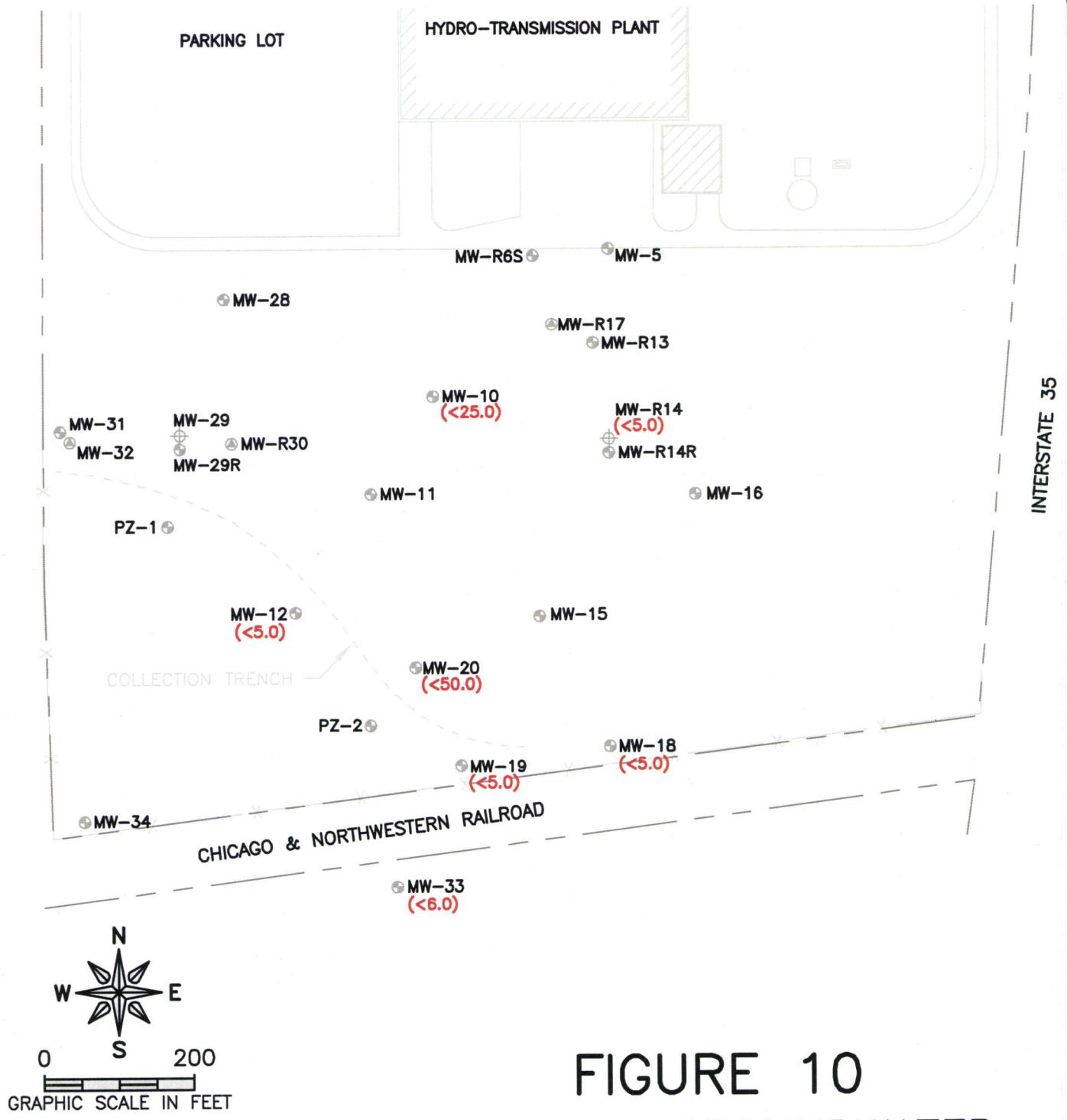


FIGURE 9
SHALLOW GROUNDWATER
1,4-DIOXANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

LEGEND

- SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- (●) DEEP MONITORING WELL
- (27.2) 1,4-DIOXANE CONCENTRATION
DETECTED IN GROUNDWATER, SHOWN
IN ug/L
- ~~~~ ISO-CONCENTRATION CONTOUR



- LEGEND
- ⊕ SHALLOW MONITORING WELL (ABANDONED)
 - SHALLOW MONITORING WELL
 - Ⓐ DEEP MONITORING WELL
 - (^{27.2}) METHYLENE CHLORIDE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L

G:\EGLPT\12\12-233\12-233 Base.dwg, 10



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FIGURE 10
SHALLOW GROUNDWATER
METHYLENE CHLORIDE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

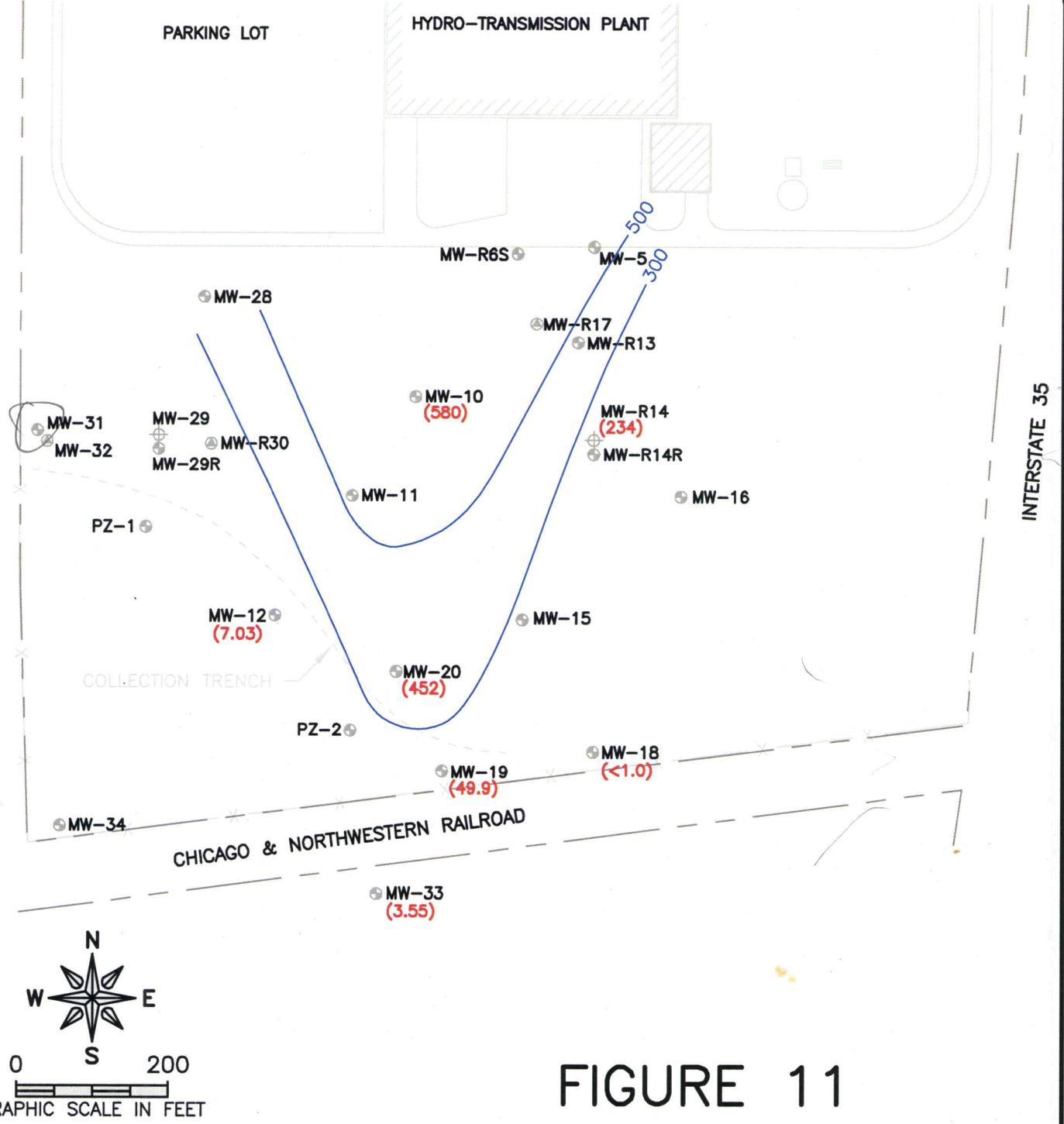
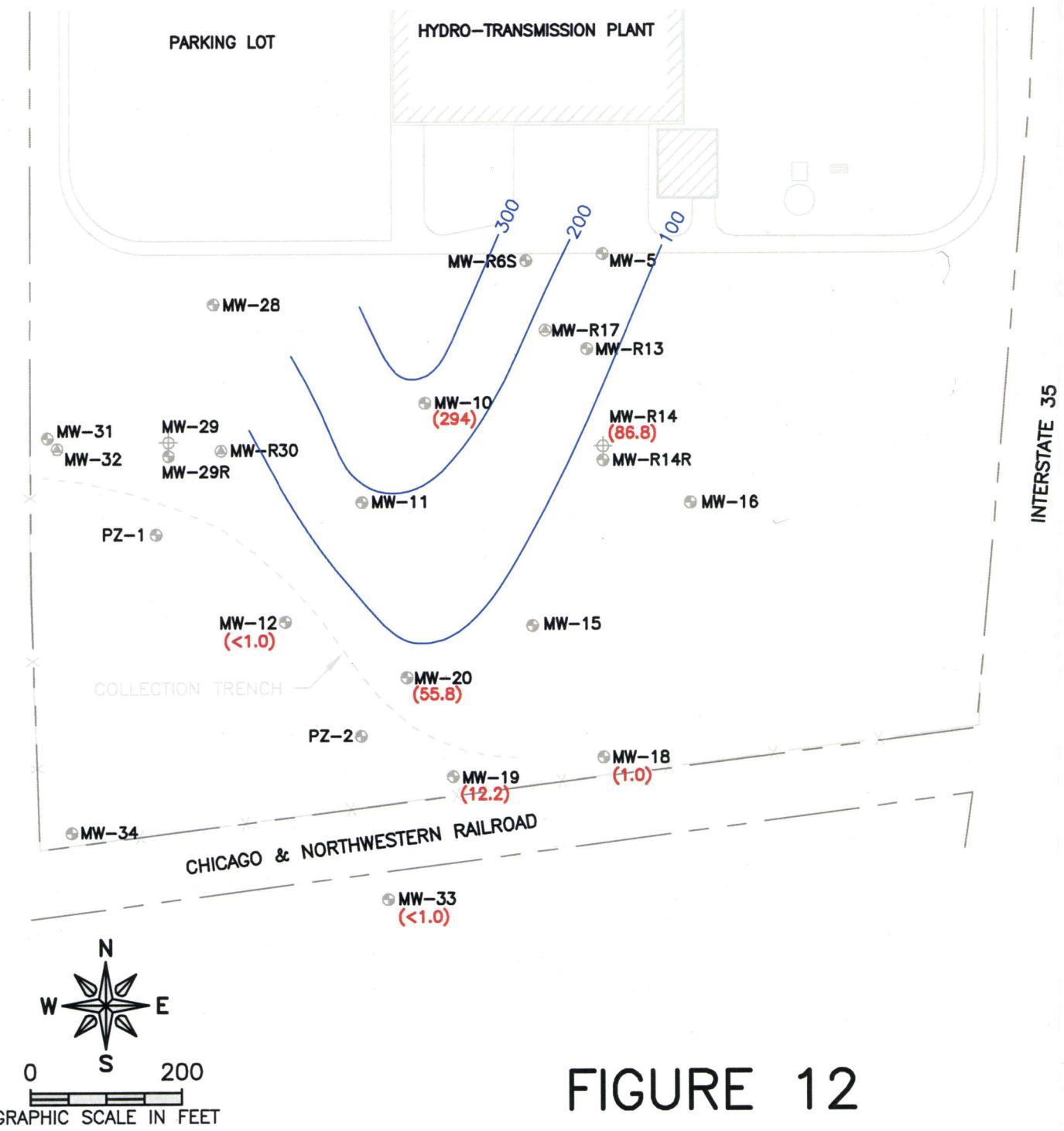


FIGURE 11
SHALLOW GROUNDWATER
TETRACHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

LEGEND

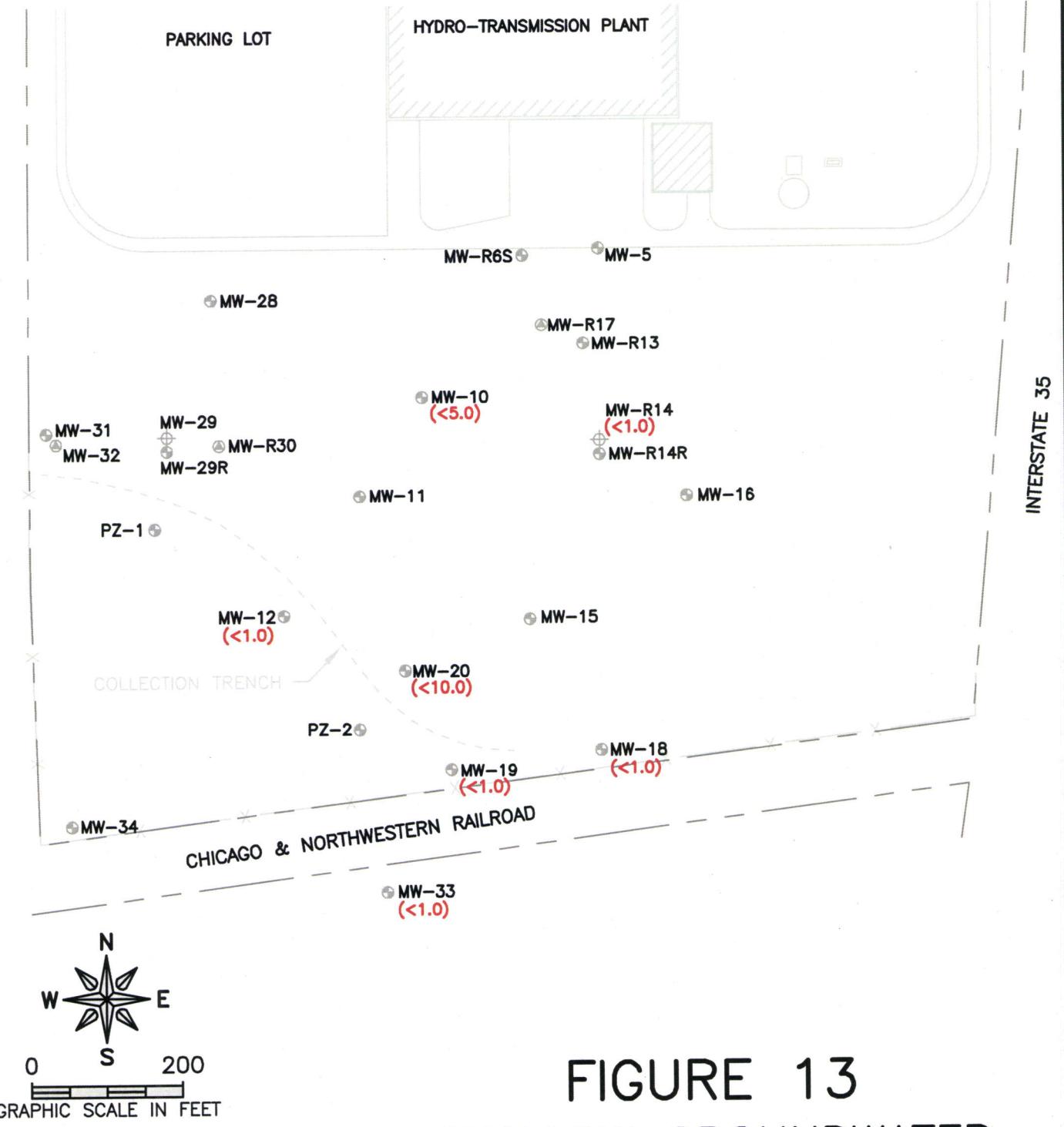
- SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- (27.2) TETRACHLOROETHENE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L
- ~ ISO-CONCENTRATION CONTOUR



LEGEND

- SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- △ DEEP MONITORING WELL
- (27.2) 1,1,1-TRICHLOROETHANE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L
- (20) ISO-CONCENTRATION CONTOUR

FIGURE 12
SHALLOW GROUNDWATER
1,1,1-TRICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA



- LEGEND
- ⊕ SHALLOW MONITORING WELL (ABANDONED)
 - SHALLOW MONITORING WELL
 - Ⓐ DEEP MONITORING WELL
 - (27.2) 1,1,2-TRICHLOROETHANE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L
 - ~~~~ ISO-CONCENTRATION CONTOUR

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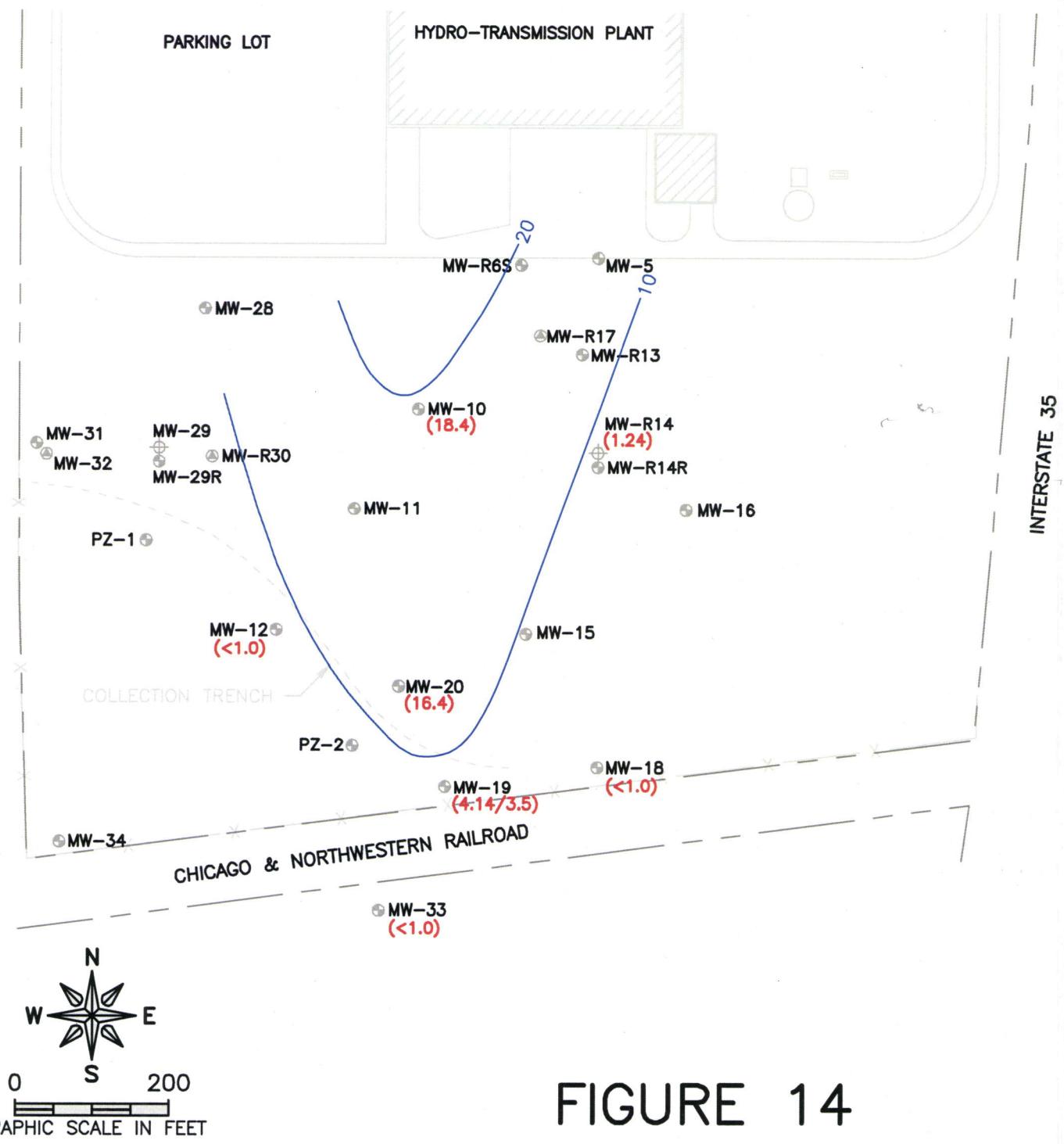


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FIGURE 13
SHALLOW GROUNDWATER
1,1,2-TRICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA



LEGEND

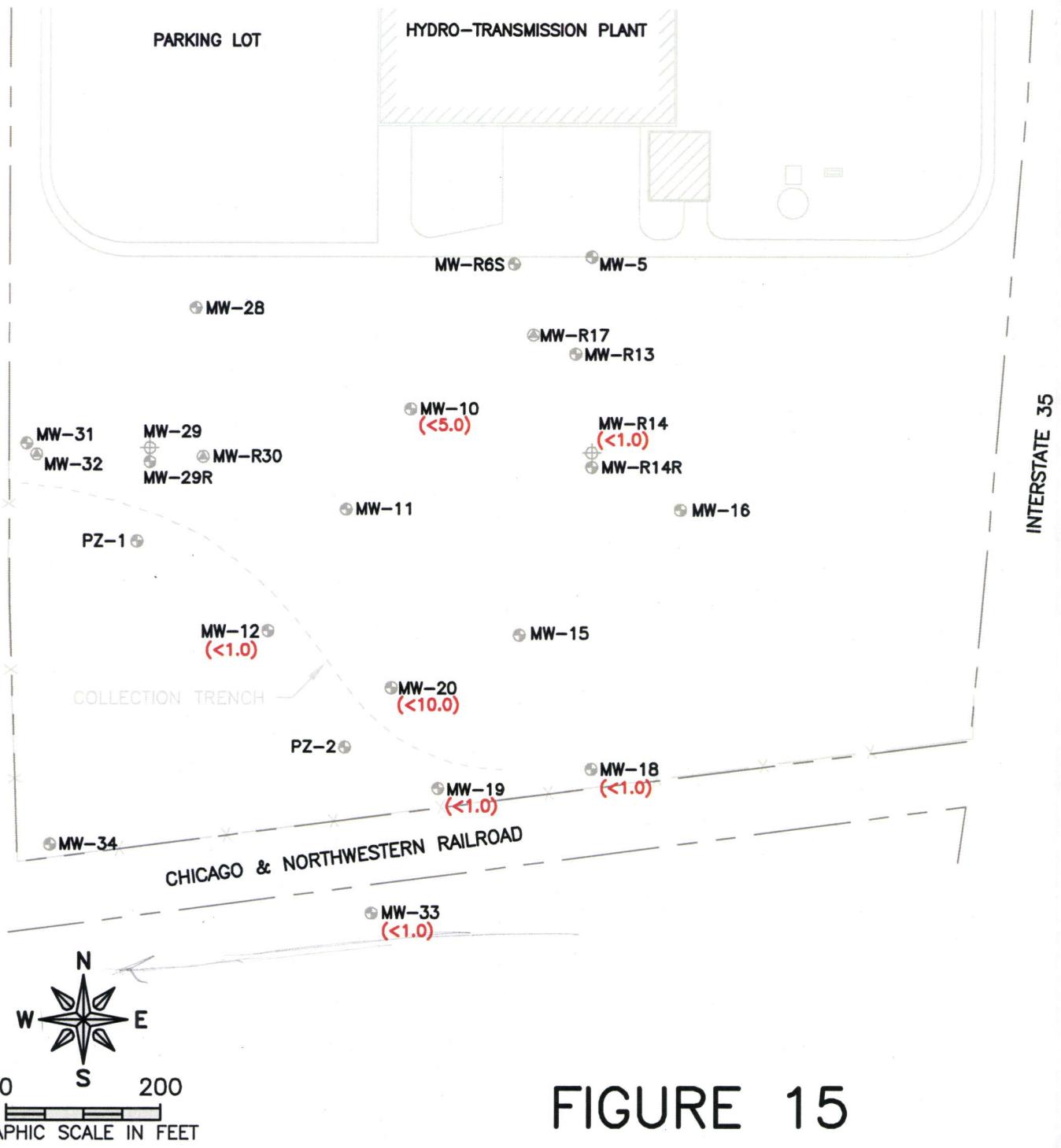
- SHALLOW MONITORING WELL (ABANDONED)
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- (27.2) TRICHLOROETHENE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L
- ~~~~ ISO-CONCENTRATION CONTOUR



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- LEGEND**
- ⊕ SHALLOW MONITORING WELL (ABANDONED)
 - SHALLOW MONITORING WELL
 - ◎ DEEP MONITORING WELL
 - (27.2) VINYL CHLORIDE CONCENTRATION DETECTED IN GROUNDWATER, SHOWN IN ug/L



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FIGURE 15
SHALLOW GROUNDWATER
VINYL CHLORIDE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

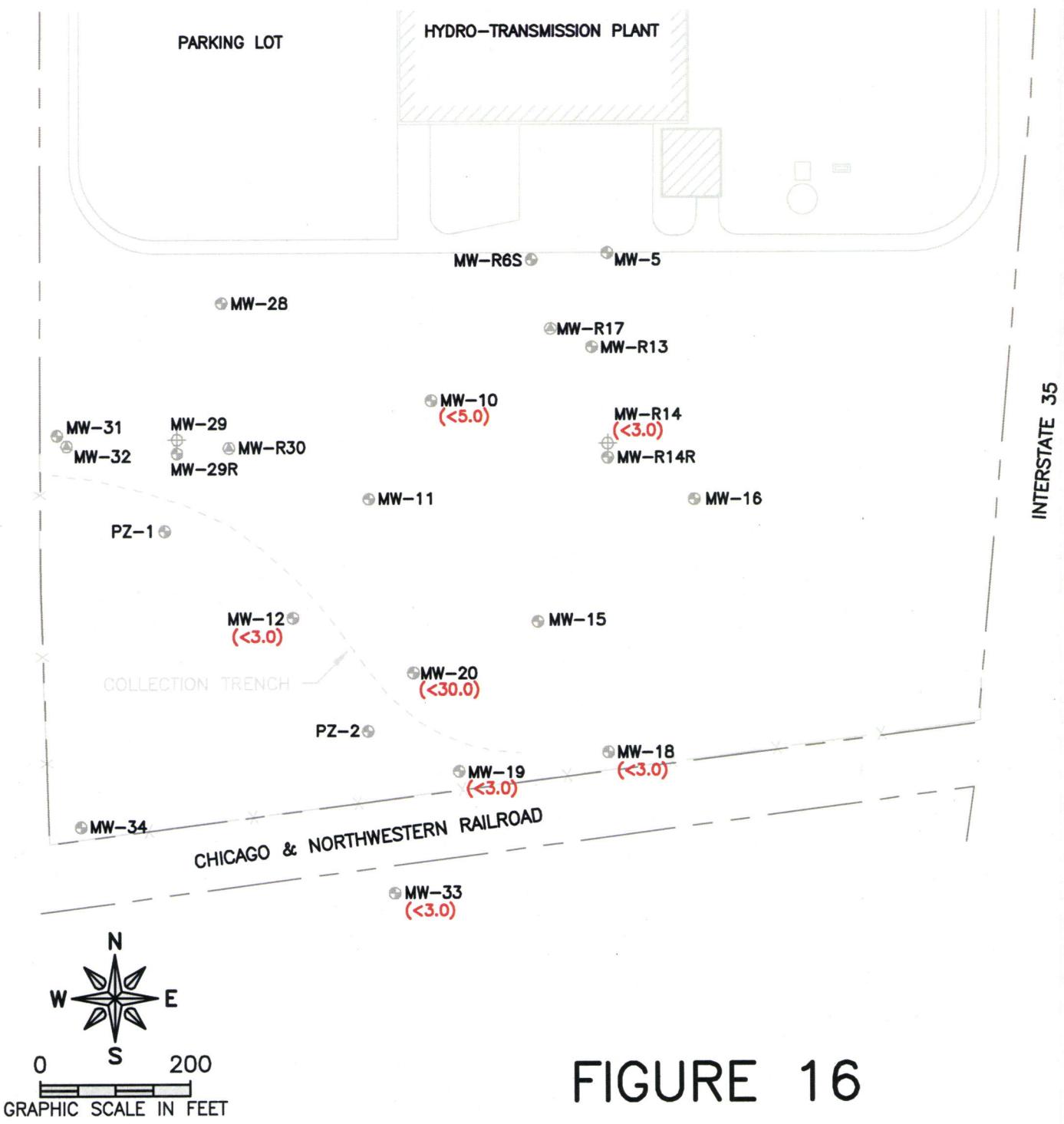
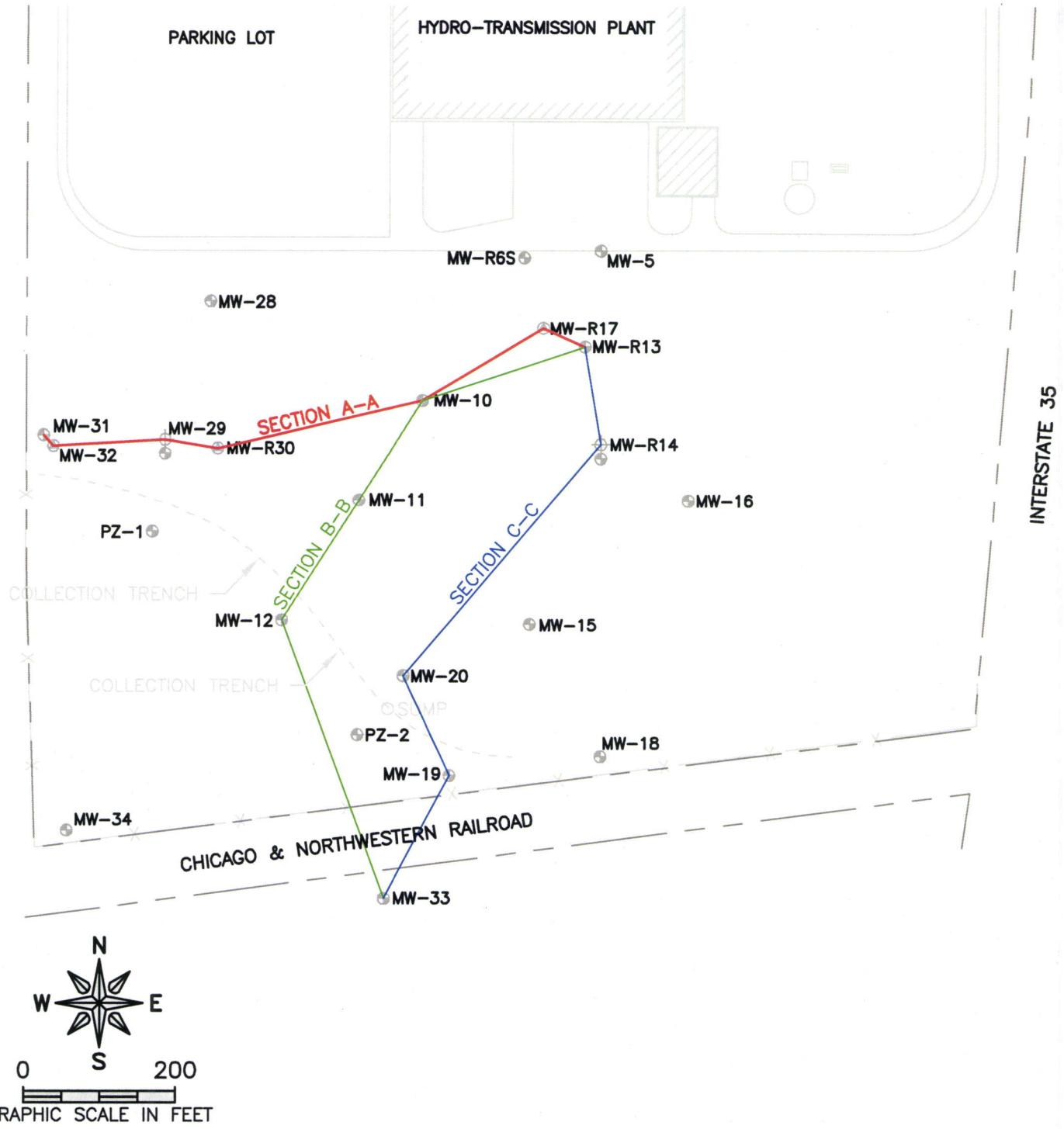


FIGURE 16
SHALLOW GROUNDWATER
XYLENE
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12



LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL

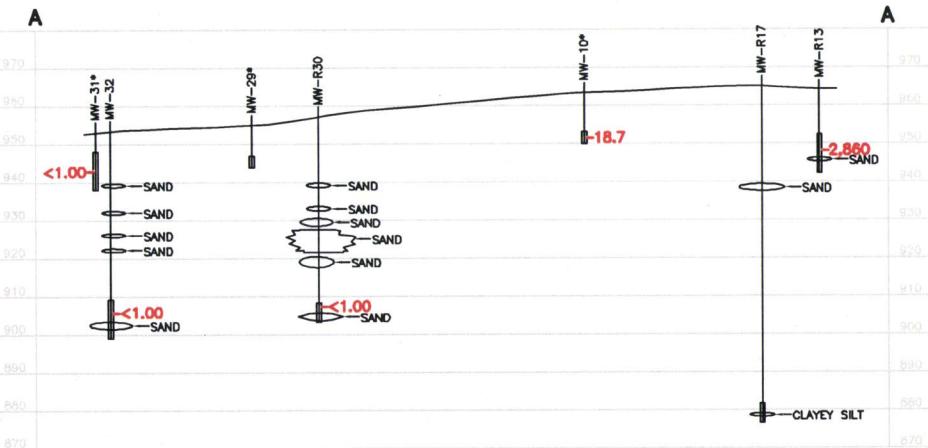
FIGURE 16
CROSS SECTION MAP
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12



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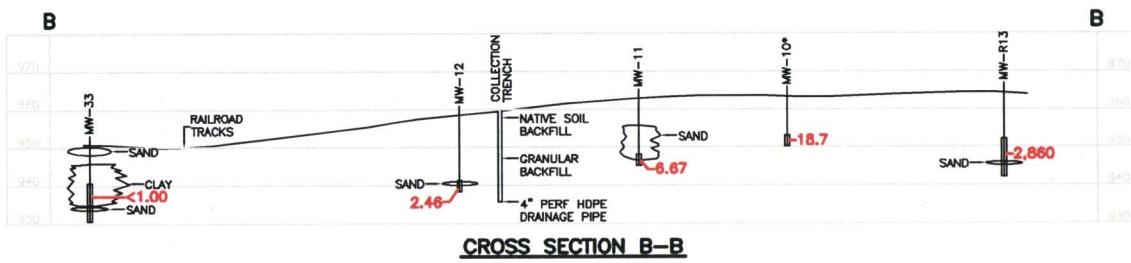
CROSS SECTION A-A

LEGEND

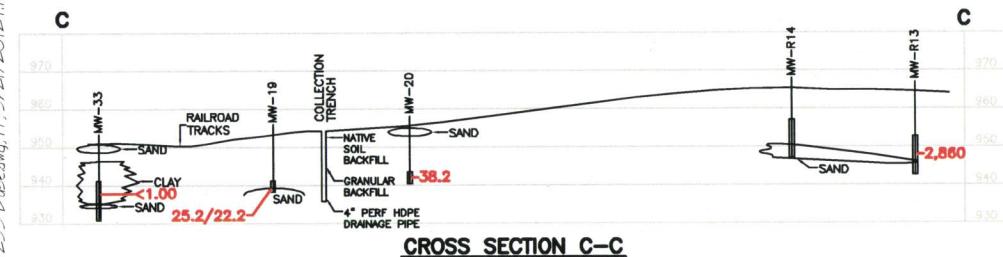
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- <1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'



CROSS SECTION B-B

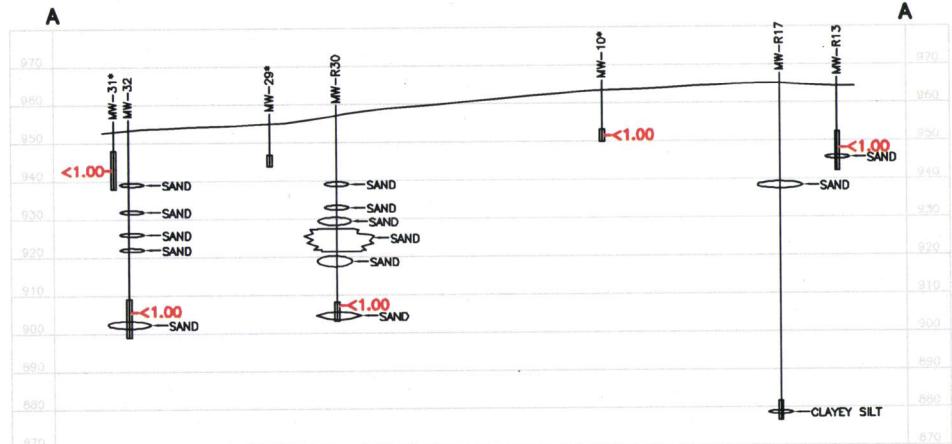


CROSS SECTION C-C

FIGURE 17
HYDROGEOLOGIC PROFILE
1,1-DICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

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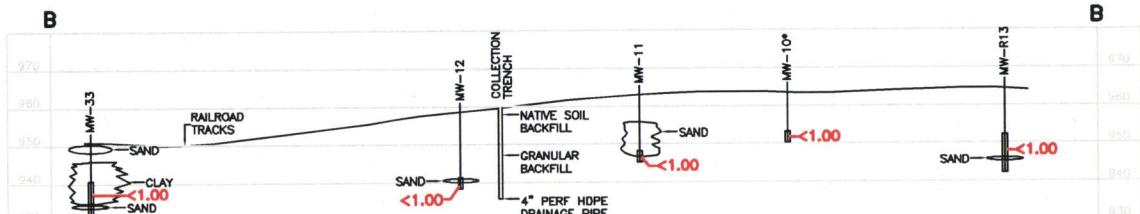


CROSS SECTION A-A

LEGEND

* GEOLOGIC PROFILE UNKNOWN

<1.00 CONCENTRATION IN ug/L

SCALEHORZ. 1" = 200'
VERT. 1" = 50'

CROSS SECTION B-B



CROSS SECTION C-C

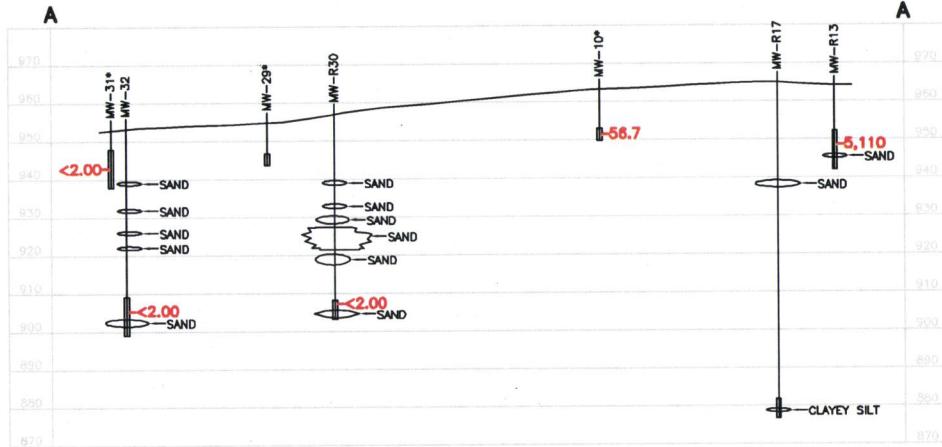
FIGURE 18
HYDROGEOLOGIC PROFILE
1,2-DICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

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LEGEND

* GEOLOGIC PROFILE UNKNOWN

<1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'

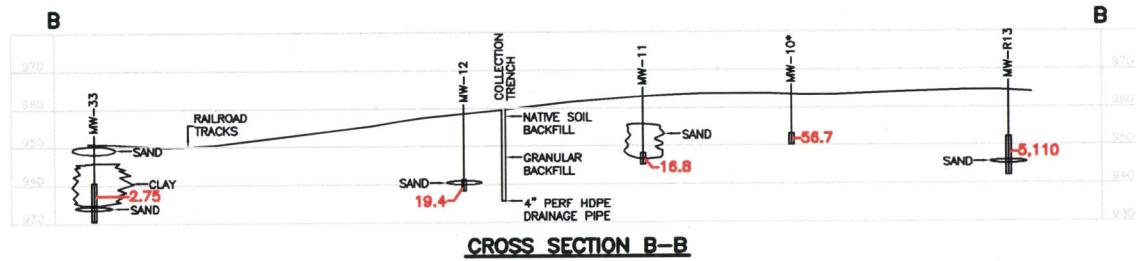
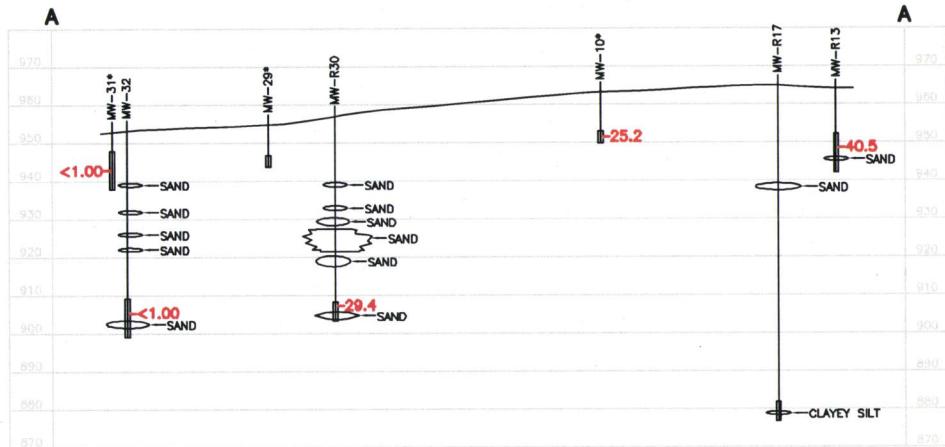


FIGURE 19
HYDROGEOLOGIC PROFILE
1,1-DICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

**LEGEND**

* GEOLOGIC PROFILE UNKNOWN

<1.00 CONCENTRATION IN ug/L

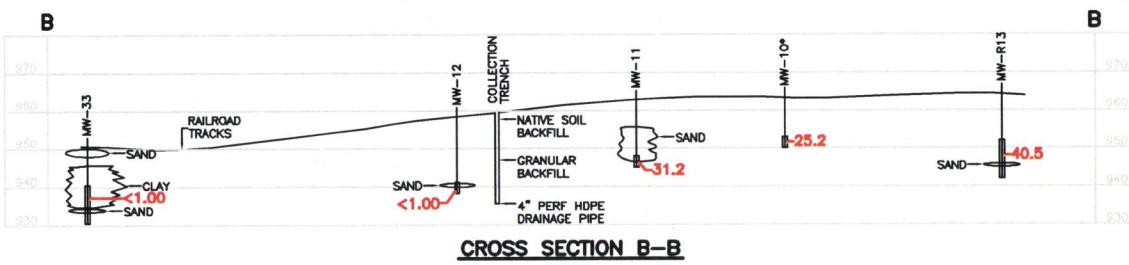
SCALEHORZ. 1" = 200'
VERT. 1" = 50'

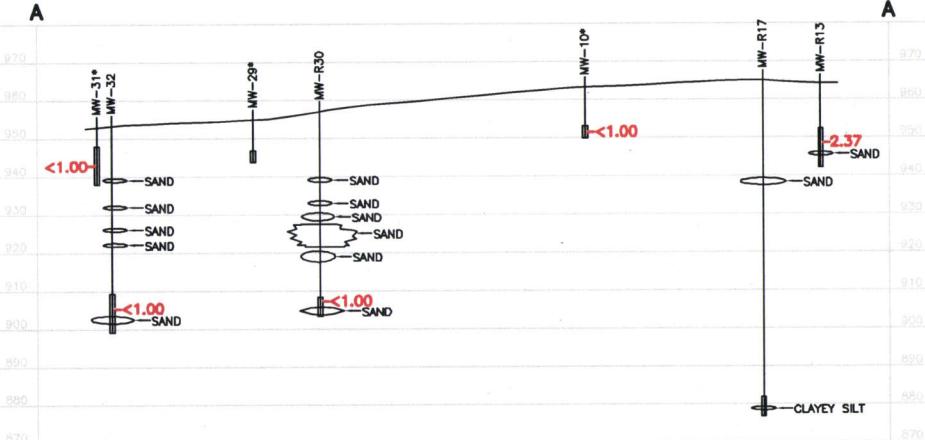
FIGURE 20
HYDROGEOLOGIC PROFILE
CIS-1,2-DICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12



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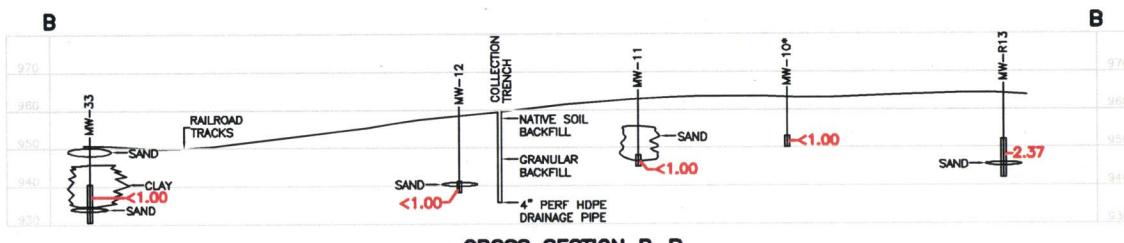


LEGEND

- * GEOLOGIC PROFILE UNKNOWN
- <1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'



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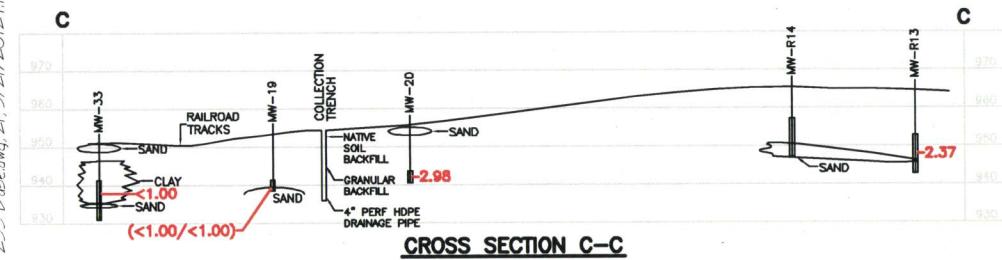


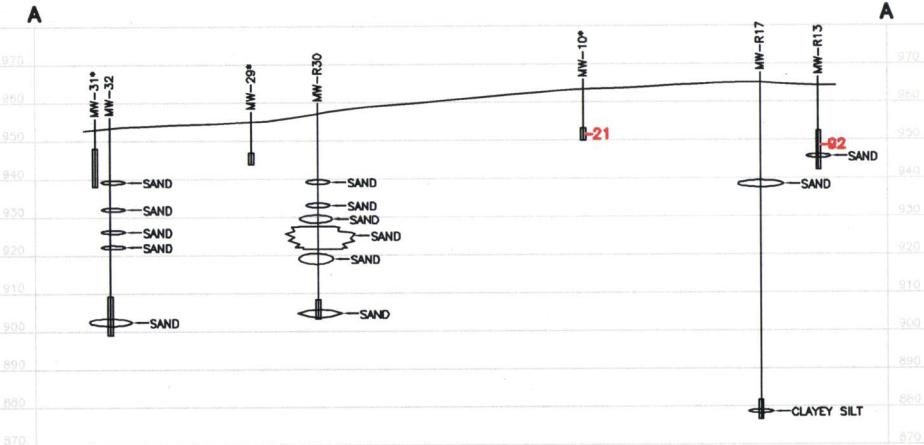
FIGURE 21
HYDROGEOLOGIC PROFILE
TRANS-1,2-DICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12



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CROSS SECTION A-A

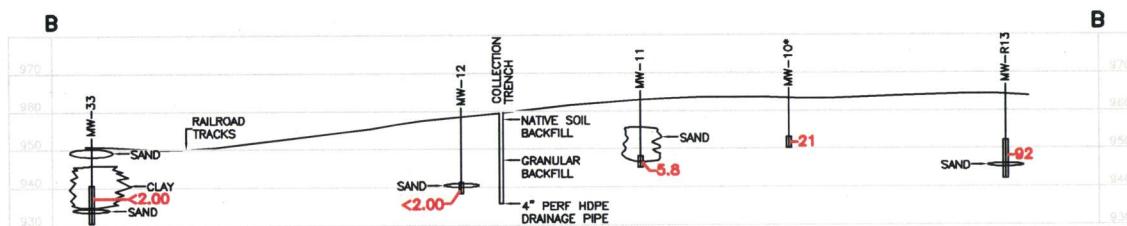
LEGEND

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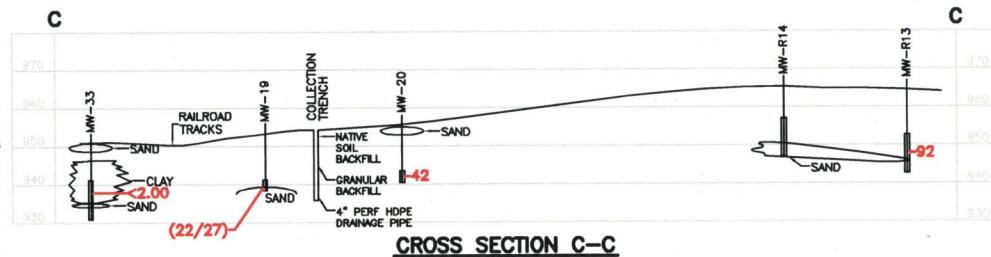
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SCALE

HORZ. 1" = 200'
VERT. 1" = 50'



CROSS SECTION B-B

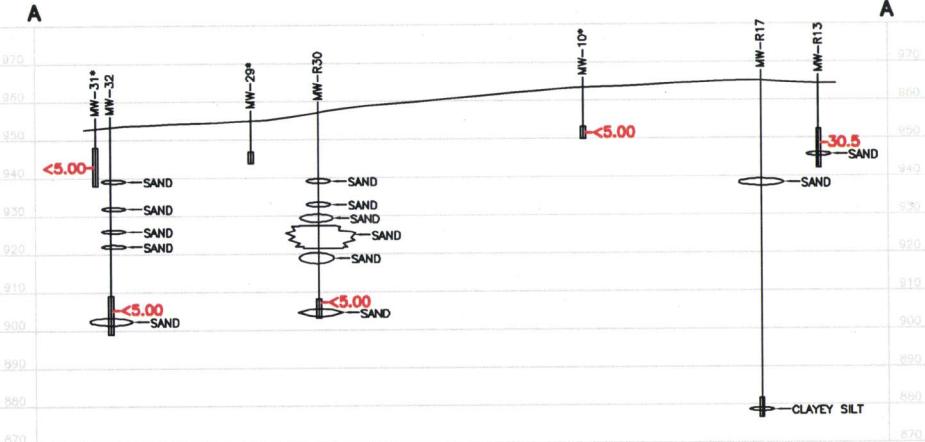


CROSS SECTION C-C

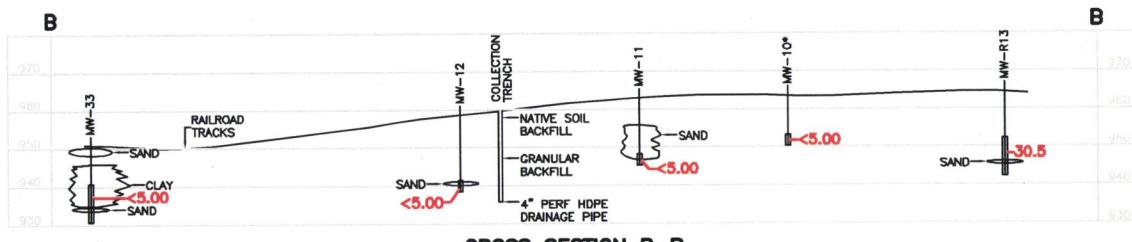
FIGURE 22
HYDROGEOLOGIC PROFILE
1,4-DIOXANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

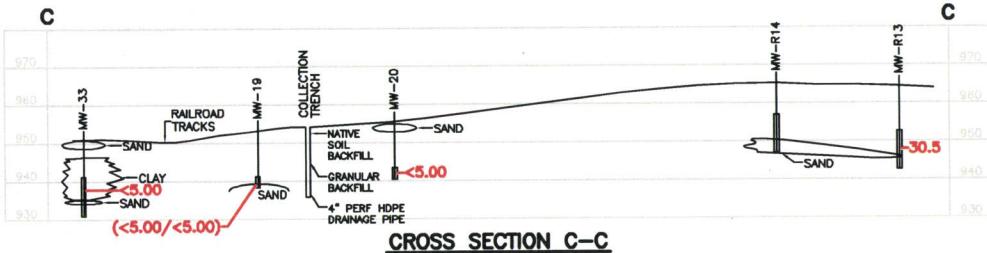




CROSS SECTION A-A



CROSS SECTION B-B



CROSS SECTION C-C

LEGEND

- * GEOLOGIC PROFILE UNKNOWN
- <1.00 CONCENTRATION IN ug/L

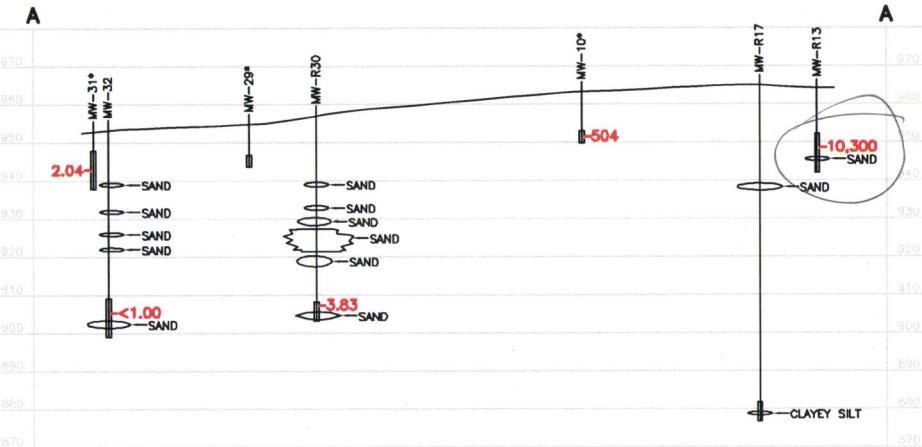
SCALE

HORZ. 1" = 200'
VERT. 1" = 50'

FIGURE 23
HYDROGEOLOGIC PROFILE
METHYLENE CHLORIDE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12





LEGEND

- * GEOLOGIC PROFILE UNKNOWN
- <1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'

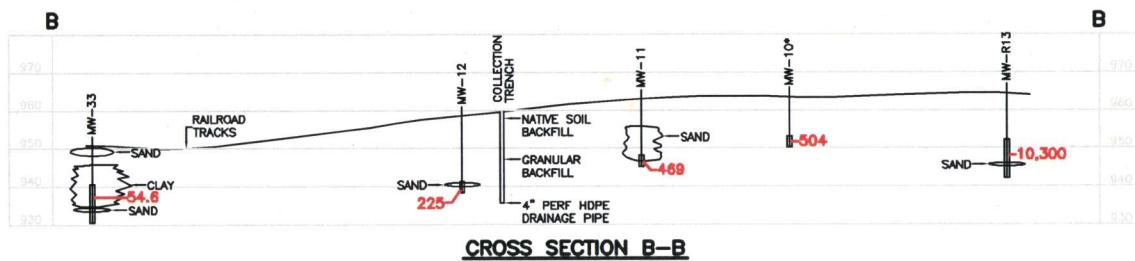
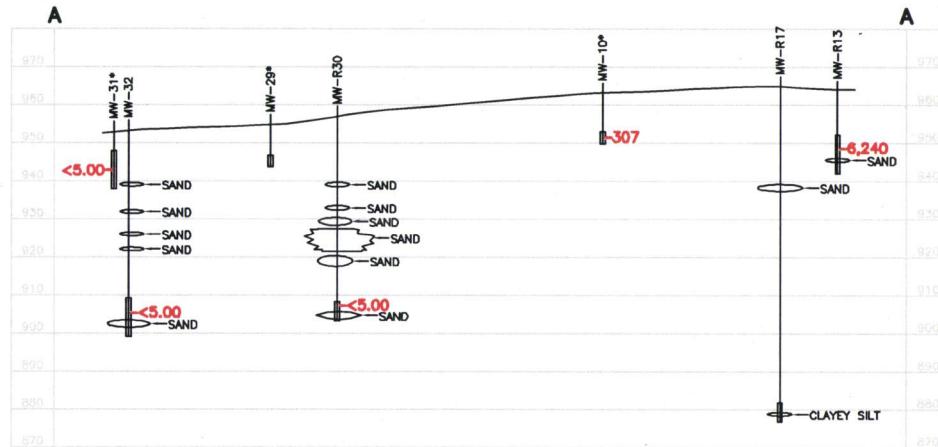
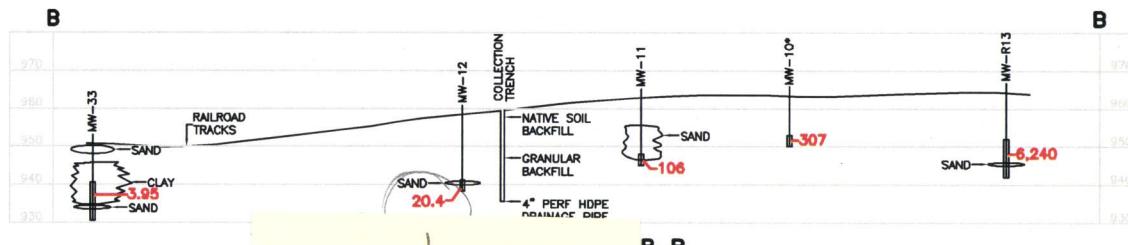


FIGURE 24
HYDROGEOLOGIC PROFILE
TETRACHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2012
SAUER-DANFOSS FACILITY
AMES, IOWA

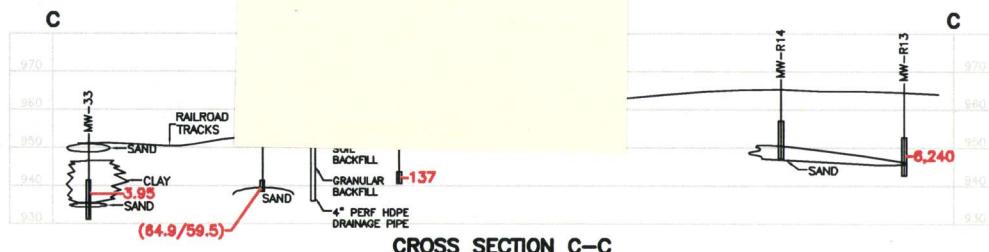
4/23/12



CROSS SECTION A-A



2010 Data



CROSS SECTION C-C

LEGEND

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- <1.00 CONCENTRATION IN ug/L

SCALE

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VERT. 1" = 50'

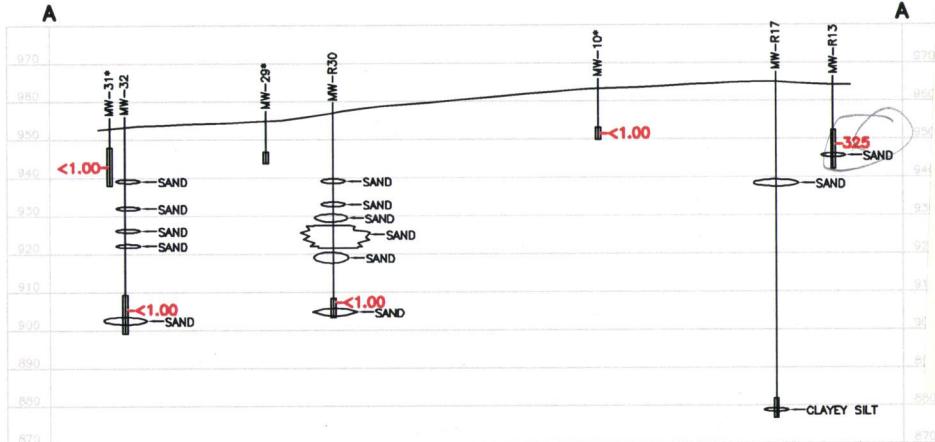
FIGURE 25
HYDROGEOLOGIC PROFILE
1,1,1-TRICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

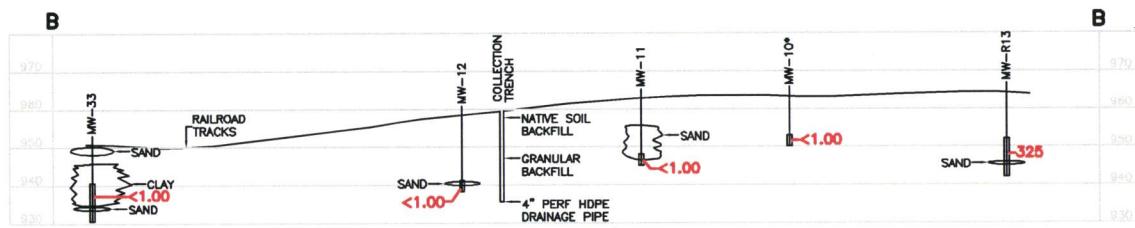


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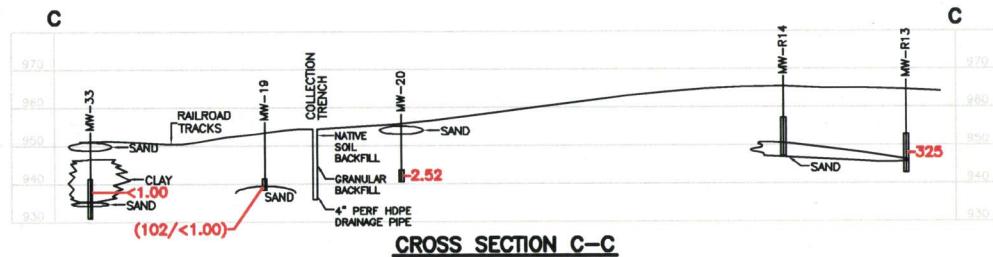
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CROSS SECTION A-A



CROSS SECTION B-B



CROSS SECTION C-C

LEGEND

* GEOLOGIC PROFILE UNKNOWN

<1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'

This is
2010
Data

B

C

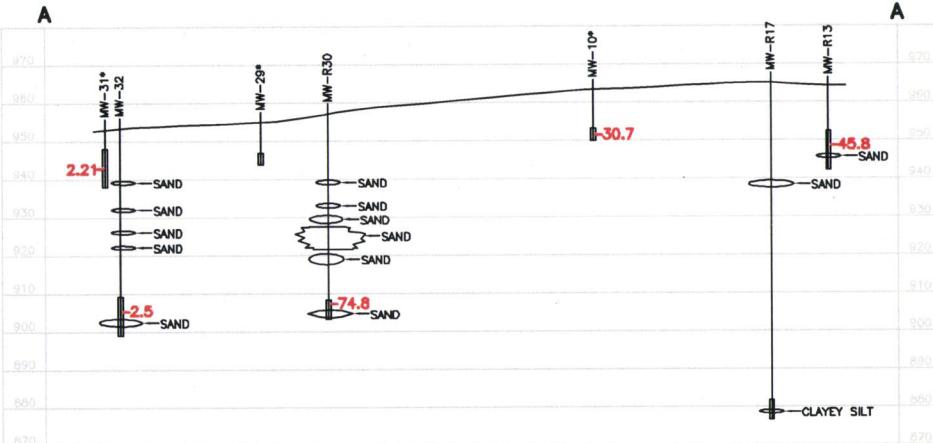
B

C

FIGURE 26
HYDROGEOLOGIC PROFILE
1,1,2-TRICHLOROETHANE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12





LEGEND

* GEOLOGIC PROFILE UNKNOWN

<1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'

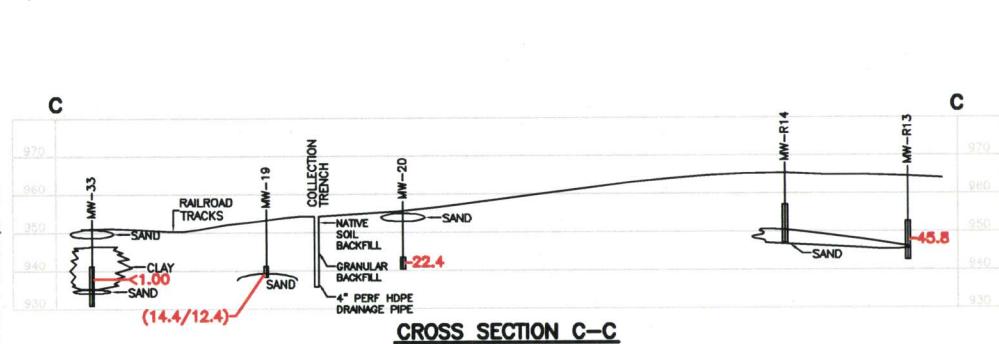
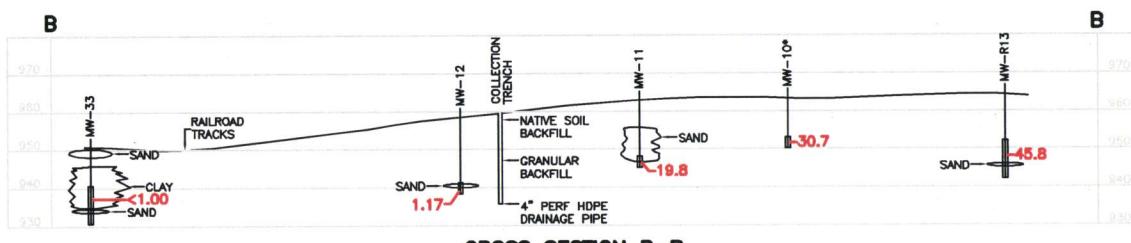


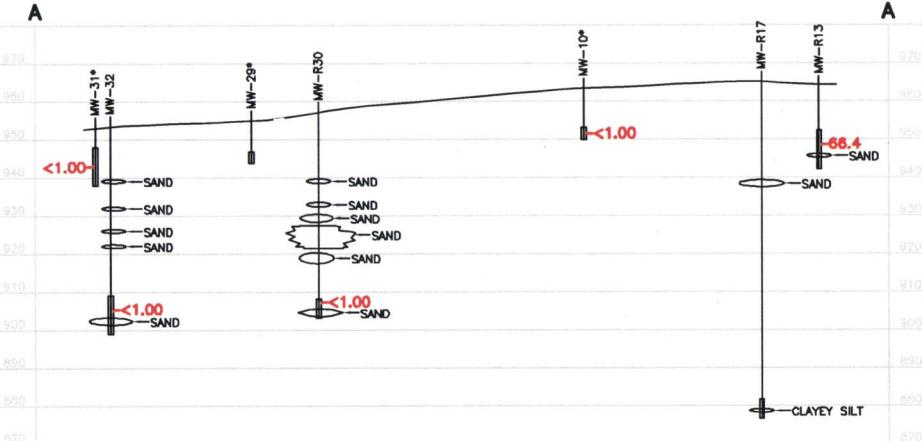
FIGURE 27
HYDROGEOLOGIC PROFILE
TRICHLOROETHENE CONCENTRATIONS
OCTOBER 19, 2011
SAUER-DANFOSS FACILITY
AMES, IOWA

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LEGEND

* GEOLOGIC PROFILE UNKNOWN

<1.00 CONCENTRATION IN ug/L

SCALE

HORZ. 1" = 200'
VERT. 1" = 50'

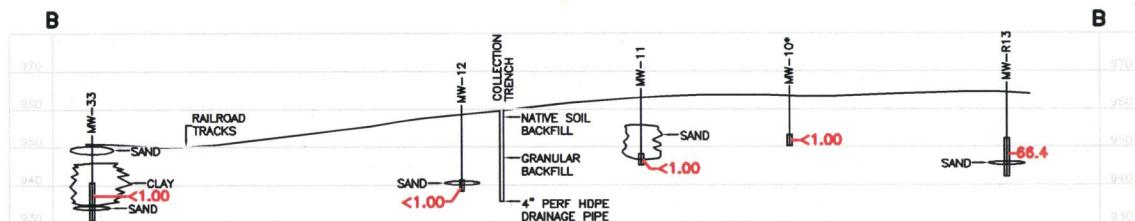


FIGURE 28
HYDROGEOLOGIC PROFILE
VINYL CHLORIDE CONCENTRATIONS
OCTOBER 19, 2010
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

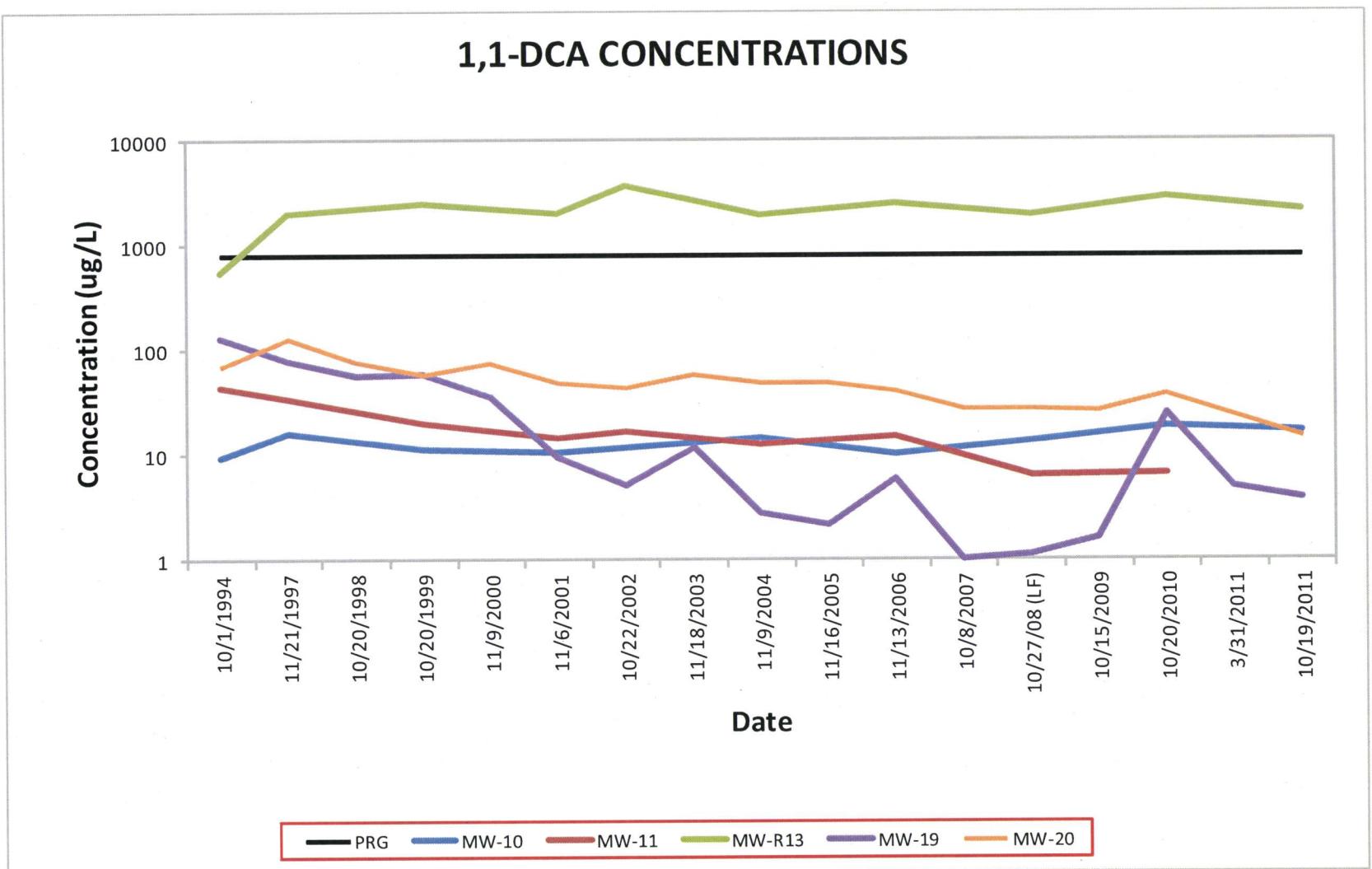


FIGURE 29
1,1-DCA CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

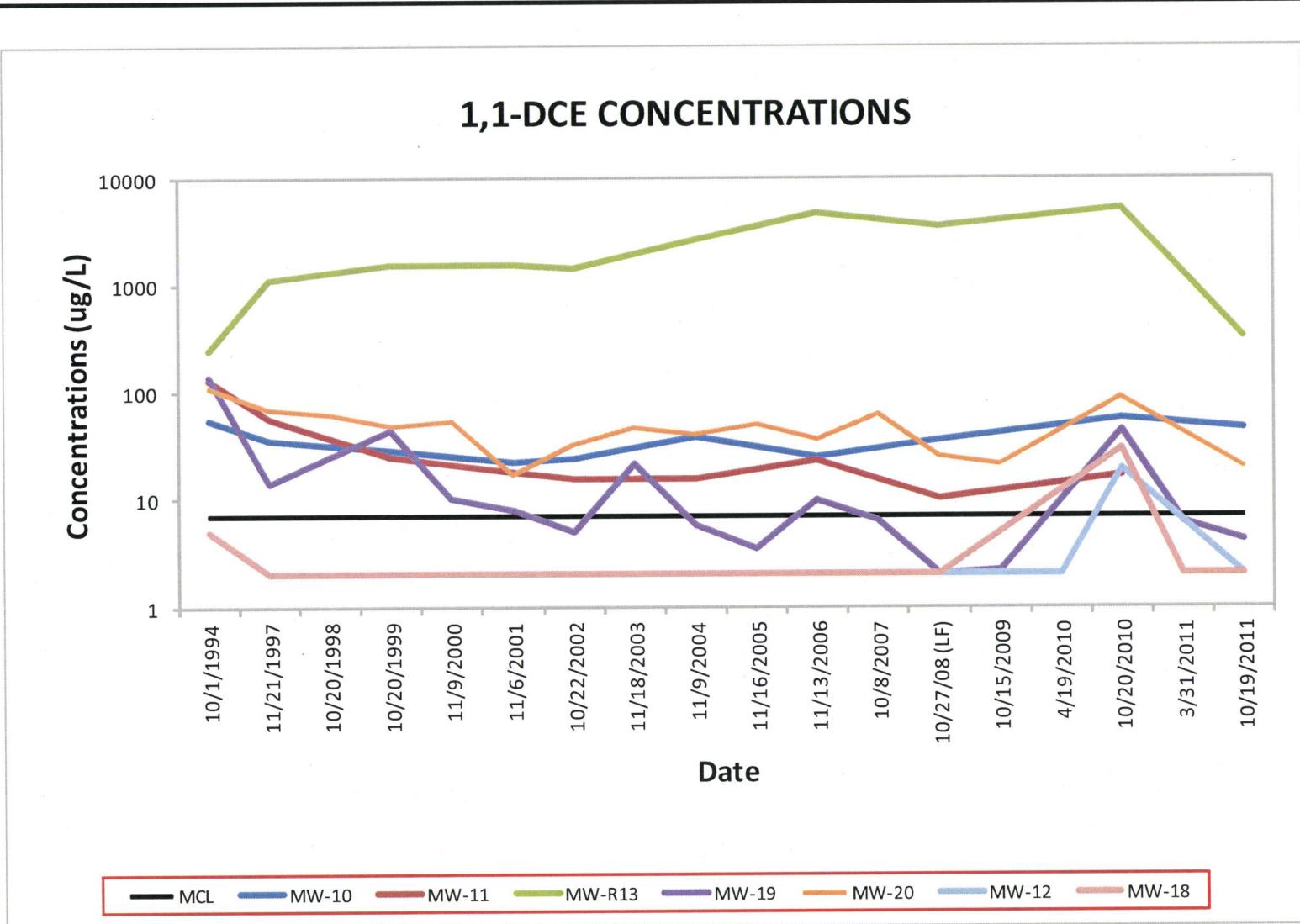


FIGURE 30
1,1-DCE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

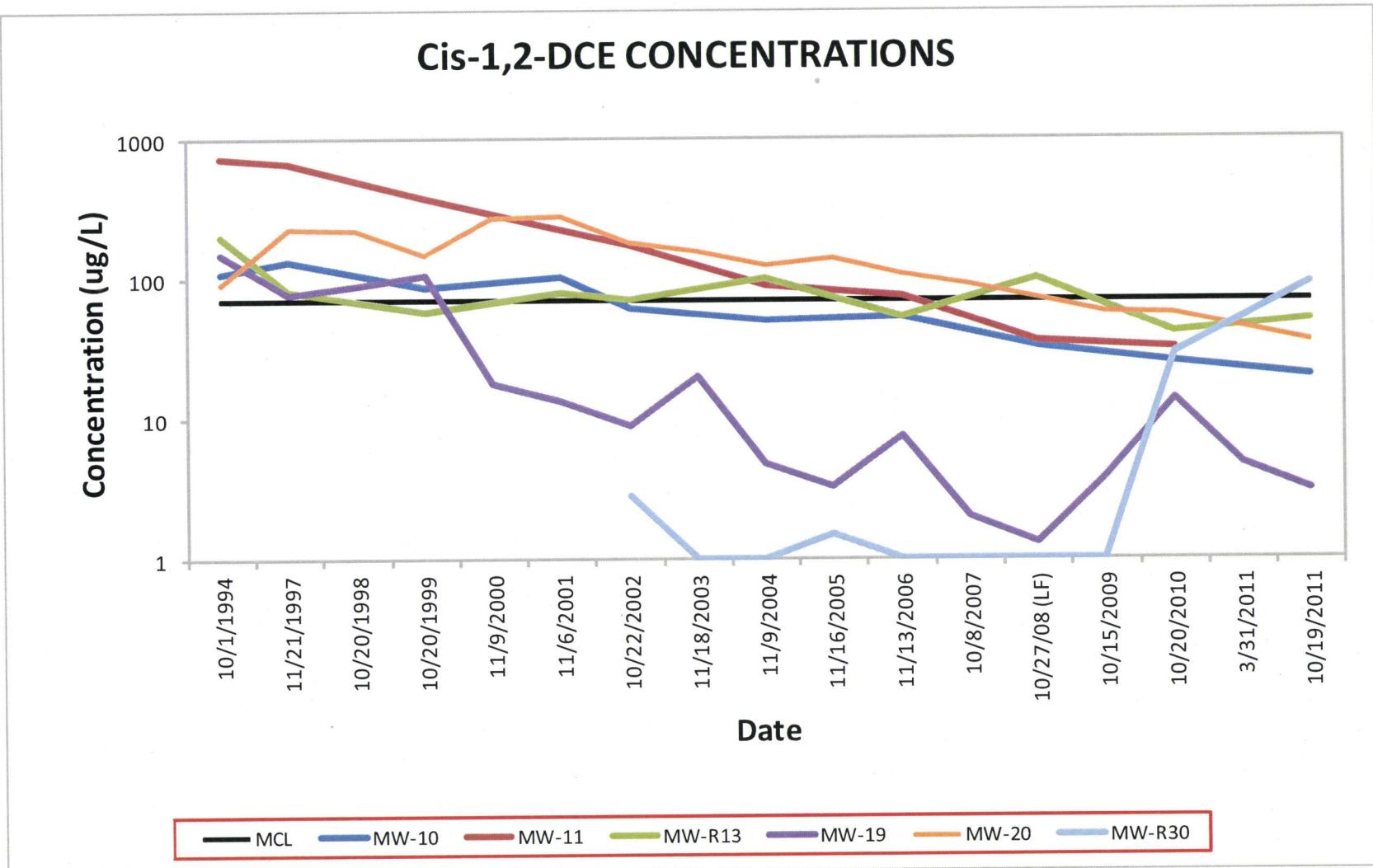


FIGURE 31
CIS-1,2-DCE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12



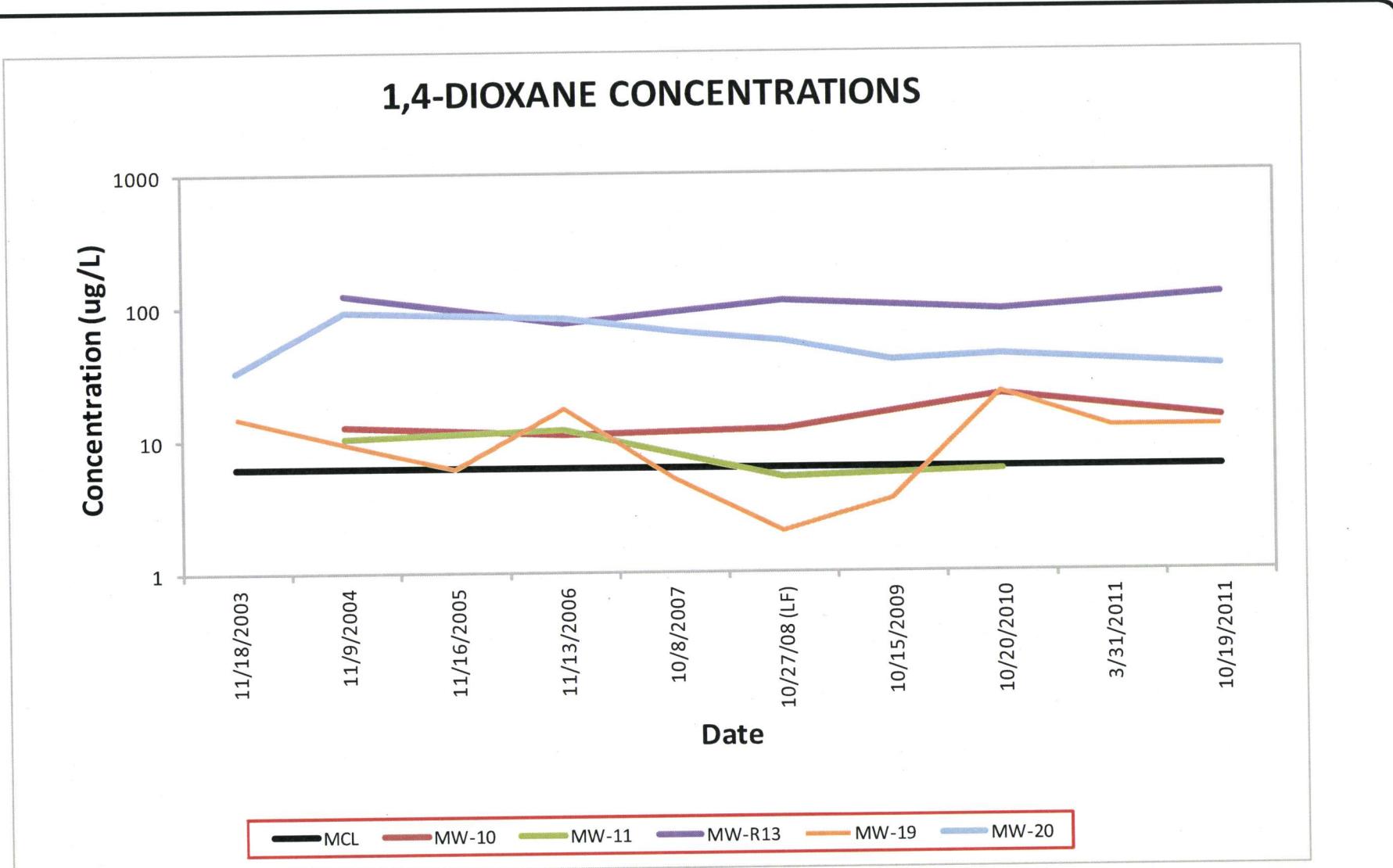
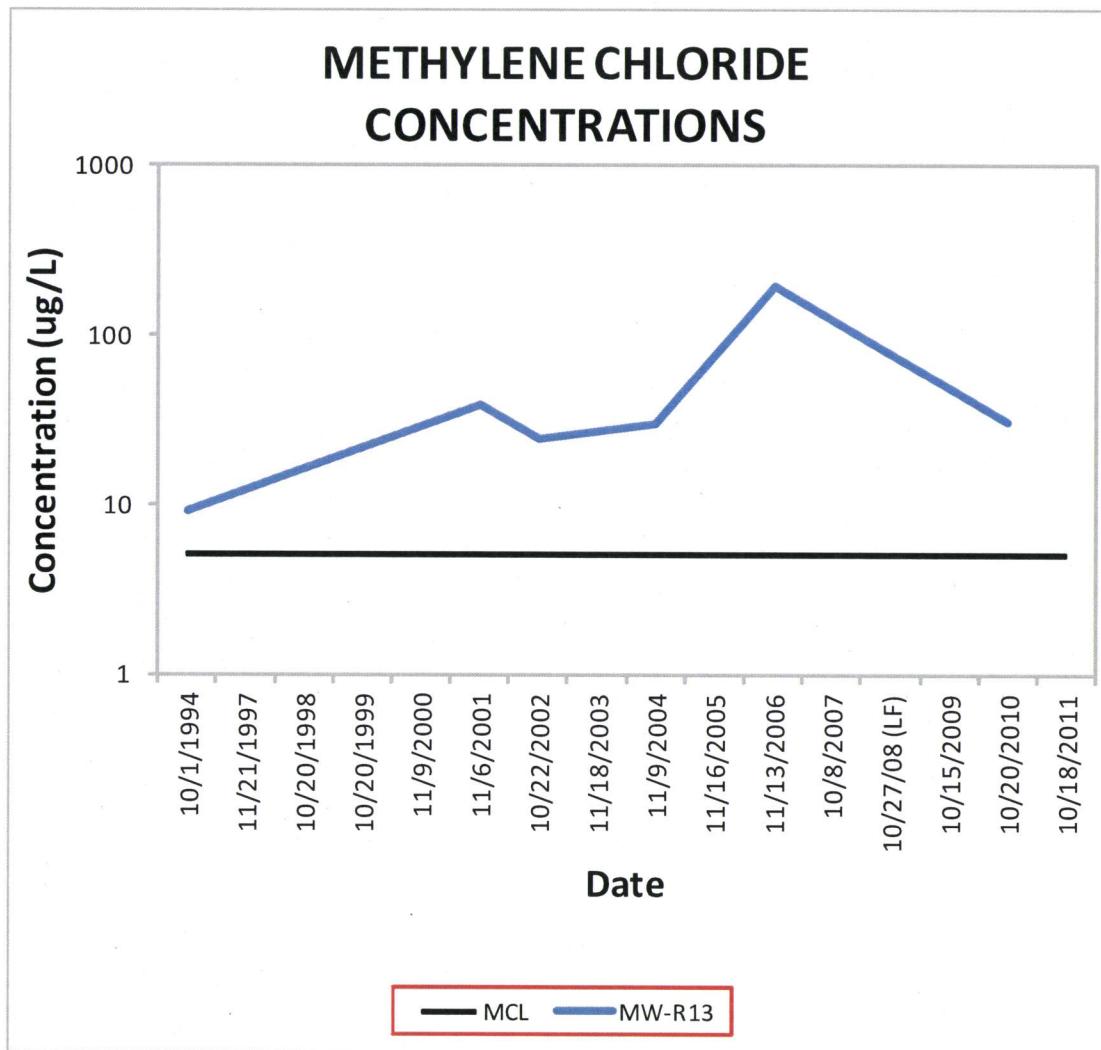


FIGURE 32
1,4-DIOXANE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA



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FIGURE 33
METHYLENE CHLORIDE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

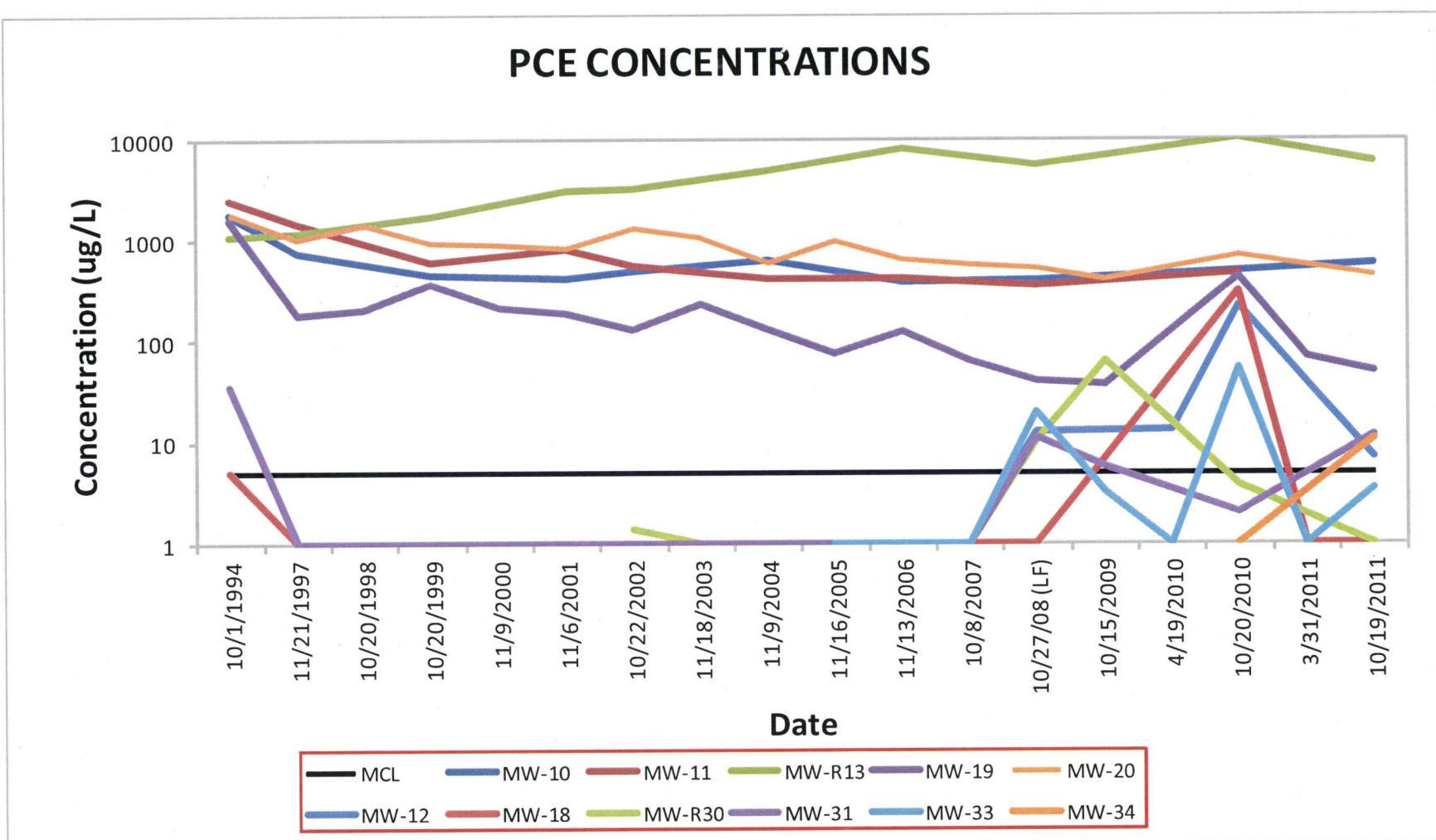


FIGURE 34
PCE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

1,1,1-TCA CONCENTRATIONS

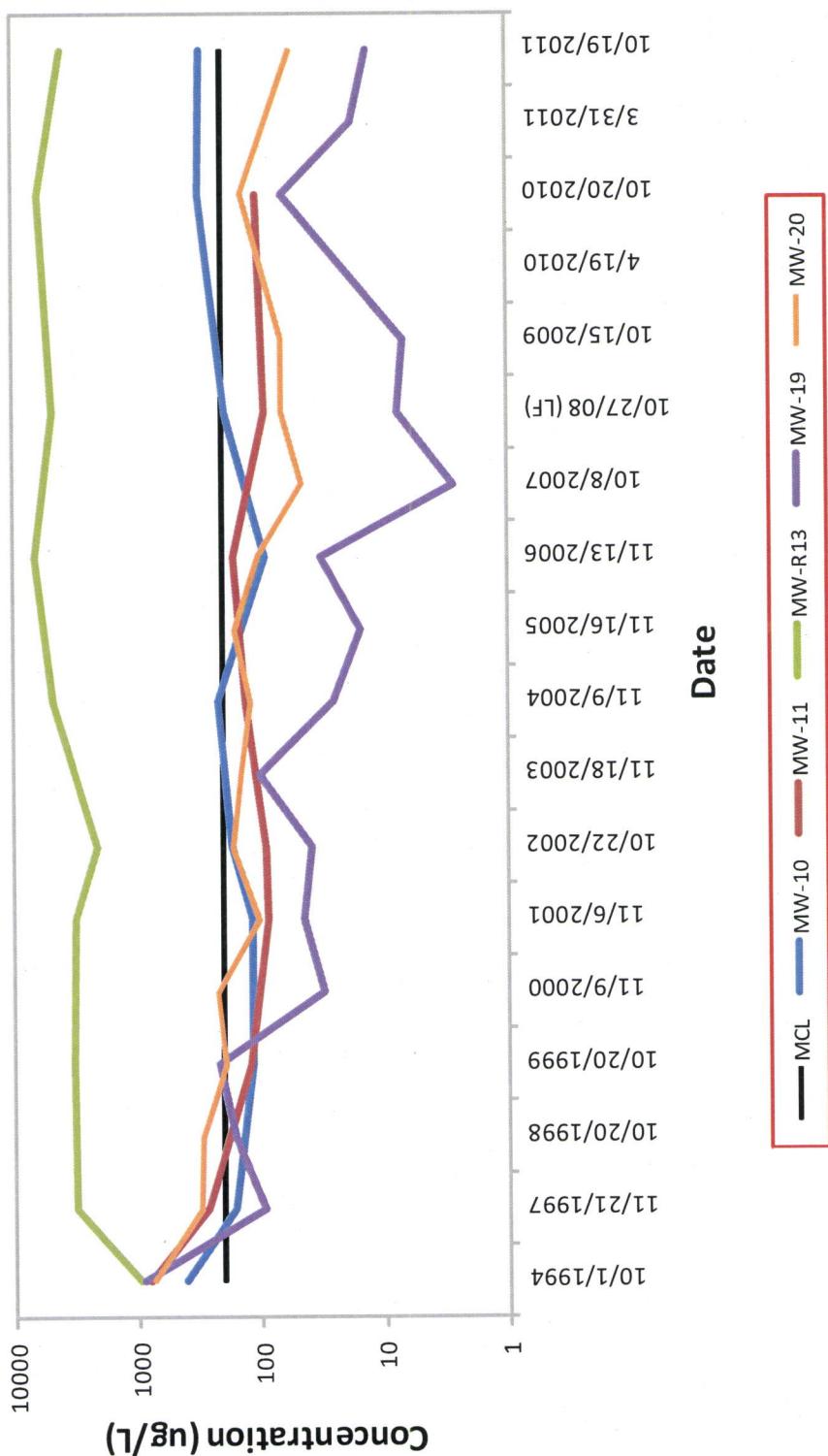


FIGURE 35
1,1,1-TCA CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

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1,1,2-TCA CONCENTRATIONS

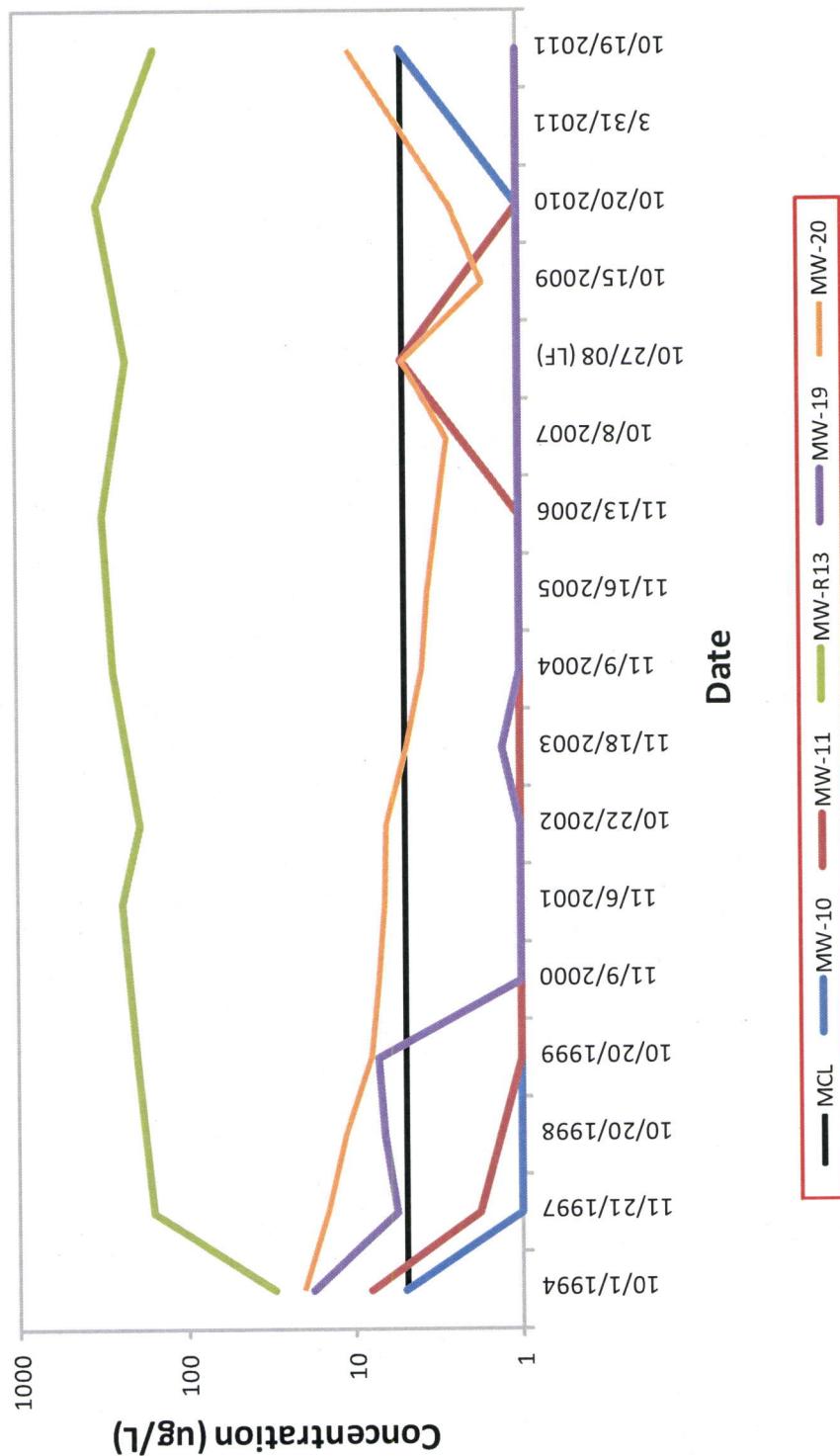


FIGURE 36
1,1,2-TCA CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12
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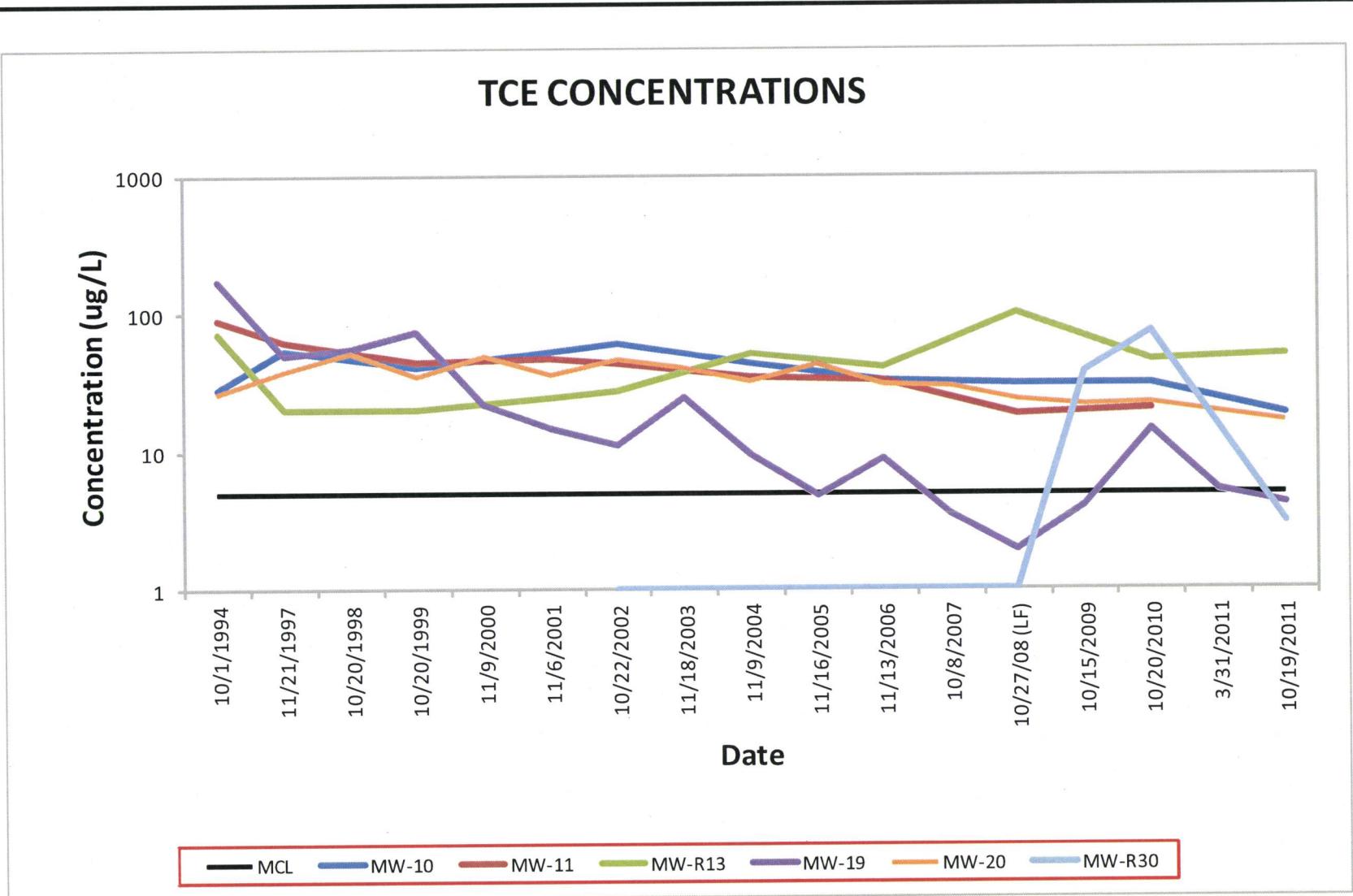


FIGURE 37
TCE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

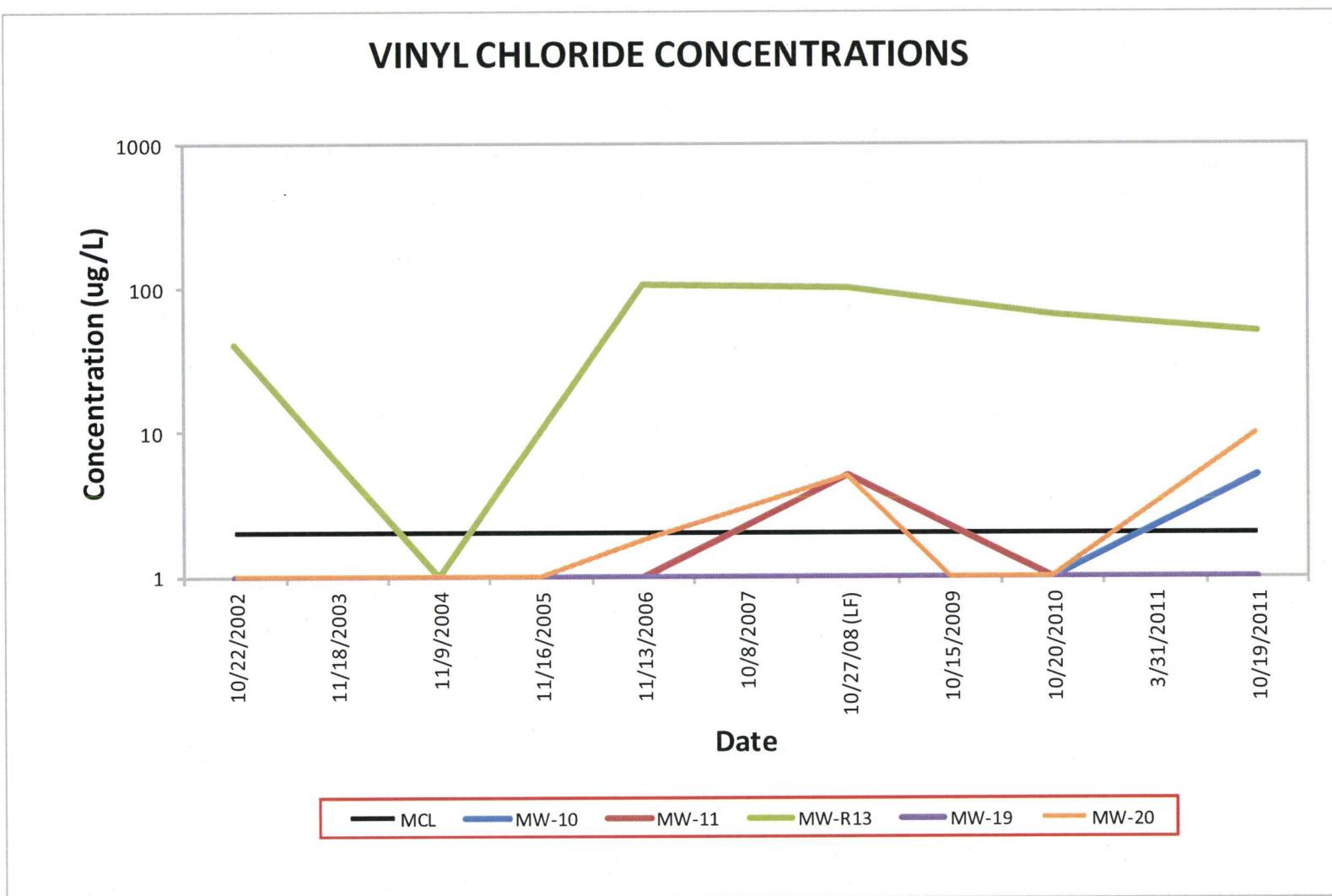


FIGURE 38
VINYL CHLORIDE CONCENTRATIONS
SAUER-DANFOSS FACILITY
AMES, IOWA

4/23/12

ATTACHMENTS

ATTACHMENT 1

2011 Semiannual Remedial System Maintenance Memorandums

MEMORANDUM

TO: Gary Erickson
FROM: Amy Schneiderman
SUBJECT: SEMIANNUAL REMEDIAL SYSTEM MAINTENANCE, 11-233
DATE: October 27, 2011

The semiannual groundwater remedial system maintenance was conducted on October 27, 2011, by Amy Schneiderman of FGA and Brian Christiansen of Mechanical Comfort, Inc. Maintenance activities are summarized below:

- Operation of the standpipe level sensor was confirmed in the manual operating mode by closing the valve on the standpipe and filling the standpipe with water. The pump was deactivated once the water level reached the level sensor.
- The transducer installation was measured at 19 feet, 3 inches (bottom of sensor/transducer to top of casing pipe, which is marked with a white plastic zip tie around the sensor cable), equal to the original installed depth of 19 feet, 3 inches.
- The sump water level was measured at 70.2 inches above the bottom of the transducer. The corresponding reading displayed by the computer controller was 71.4 inches. The computer controller was not recalibrated to correct the 1.2-inch difference between the measured water level and that displayed by the computer controller.
- The sump was probed for sediment. The sump depth, as measured from the sump cover, was 22.3 feet, 2.0 feet less than the original measurement in January 1998 (24.3 feet). The bottom of the sump is currently 1.0 feet below the incoming interception trench drainage pipe (21.3 feet).
- The inside and outside air temperatures displayed by the computer controller were confirmed with a Fluke 87 RMS multimeter. The inside air temperature was measured at 66.2 degrees Fahrenheit, compared with a computer controller reading of 68.3 degrees Fahrenheit. The outside air temperature was measured at 39.2 degrees Fahrenheit, compared with a computer controller reading of 37.5 degrees Fahrenheit. The controller was adjusted 2 degrees to match outside air temperature.
- The water temperature was measured at 56.0 degrees Fahrenheit with a thermometer, compared with a computer controller reading of 55.8 degrees Fahrenheit.

When the standpipe valve was closed to test the standpipe level sensor, the pipe began to leak. Brian Christiansen relayed this information to Sauer Danfoss and will schedule repairs. The next semiannual maintenance will be conducted during the 2nd quarter of 2012.

ATTACHMENT 2

2011 Quarterly Monitoring Reports



FEHR-GRAHAM & ASSOCIATES
Engineering & Science Consultants

SOLUTIONS SINCE 1973

UPS Tracking Number: 1Z 651 395 01 4969 6808

221 E Main St Suite 200
Freeport IL 61032
ph 815 235 7643
fax 815 235 4632
www.fehr-graham.com

April 11, 2011

City of Ames, Iowa
Water and Pollution Control Department
300 East Fifth Street, Building 1
Ames, IA 50010

FILE COPY

RE: Non-Domestic Waste Pretreatment Program Quarterly Report – 1st Quarter 2011
Sauer-Danfoss (US) Company
2800 East 13th Street, Ames, IA 50010
Facility Permit No. 6593-7

Dear Sir or Madam:

Enclosed please find the Non-Domestic Waste Pretreatment Program Quarterly Report for wastewater discharge from the above-referenced facility for the 1st quarter of 2011. Also enclosed are copies of the analytical reports from Keystone Labs and Test America for the analysis of wastewater and groundwater remediation respectively and a summary of monthly flow in gals/month from the groundwater remediation project.

Please note that the sample collected February 4, 2011, returned a violation for COD of 3,190 mg/l with a permit limit of 2,500 mg/l. A second violation for CBOD of 1,740 mg/l with a permit limit of 1,500 mg/l was also noted. A sample collected March 16, 2011, returned a result of 1,950 mg/l for COD, but 1,580 mg/l for CBOD. A response to these violations was submitted to Matt Hawes of the City of Ames, on April 4, 2011. Per the direction of Mr. Hawes, the original result is reported here, and the analytical report for both is enclosed.

Should you have any questions regarding these documents, please do not hesitate to contact this office.

Sincerely,

Amy L. Schneiderman
Environmental Specialist

ALS:mll
K:\Sec\SEC 2011\11-313\KRT 11-313 - 1st Qtr Wastewater to City of Ames.doc
Enclosures

cc: Sauer-Danfoss (with enclosure)

**Non-Domestic Waste Pretreatment Program
Quarterly Report
(Non-Significant, Non-Domestic Contributor)**
1st Quarter 2011
Reporting Period: 1/1/2011 to 3/31/2011
Submit results on or before the 10th of the month following the end of the quarter

Facility: Sauer-Danfoss
 Permit No: 6503-7
 Facility Contact: Gary Erickson
 Facility Phone No: 516-239-8000
 Sampling Location: Front Parking Lot North Manhole (Wastewater) On-Site Wastewater Treatment
 Sample Type: Sample Port (GW Remediation)
 Sample Date: 2/22/11 (GW Remediation); 2/4/11 (Wastewater)

Analyte	Permit Limit Mg/L	Sample Results Mg/L
Facility	Sauer Danfoss 2800 East 13th	Sauer Danfoss 2800 East 13th
Flow	Gals/Day	27,290
pH	6-10 pH	7.90
TSS	1,500	1,440
Cyanide	0.68	0.007
Ammonia (N)-NH ₃	200	23.8
Total Kjeldahl Nitrogen (TKN)	250	101.0
Oil & Grease	300	93
CBOD 5	1,500	1,740
COD	2,500	3,190
Molybdenum	0.18	0.041
GW remediation		Max Expected Concentration up/L
Flow (remediation)	Gals/Qstr	602,353
Arapone	44	<5
1,1-Dichloroethane	370	4.7
1,1-Dichloroethene	170	0.2
cis-1,2-Dichloroethene	480	36
Tetrachloroethene	1700	400
1,1,1-Trichloroethane	550	32
Trichloroethene	110	15
Total Xylenes	11	<1

Note: Please attach sample results from Laboratory

Process or Treatment Change: None

Additional Comments: Please see attached for Groundwater Remediation Flow Data.
 Results for initial sample collection are reported above. Subsequent analysis was below permit limits for COD (1850 mg/L) but not CBOD (1580 mg/L).
 Analytical reports for both are attached.

I hereby declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information intended. Based on my inquiry of the person(s) who manage the system, or those personally responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed

Gary Erickson

Date 4-12-11

Authorized Representative

Sauer-Danfoss
Ames, IA
Groundwater Remediation Flow Data

January 2011	167,207
February 2011	179,919
March 2011	255,227
Total flow (gals) 1st Quarter:	602,353
	6,693 gpd

of days in Quarter =

90

Keystone Analytical Report

2/4/11



ANALYTICAL REPORT

February 15, 2011

Page 1 of 15

Work Order: 11B0159

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information

Date Received: 02/04/2011 12:45PM
Collector: Pryke
Phone: (515) 239-6539
PO Number: 4501353392

Project : Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11B0159-01	Front Parking Lot North Manhole			Matrix:Water		Collected:	02/04/11 11:25
CBOD (5 day)	1740 mg/l	4	IB10422	SM 5210 B	JRP	02/04/11 14:45	
Cyanide, total	0.007 mg/l	0.007	IB11043	4500CN-E	DRB	02/11/11 8:00	
Chemical Oxygen Demand	3190 mg/l	1000	IB10762	EPA 410.4	SAI	02/08/11 13:49	
Nitrogen, Ammonia	23.9 mg/l	1.0	IB10820	SM 4500-NH3 B,E	JDK	02/08/11 15:08	
Oil/Grease, animal/vegetable	90 mg/l	7	IB10732	EPA 1664	DRB	02/07/11 10:14	
Oil/Grease, petroleum	<7 mg/l	7	IB10732	EPA 1664	DRB	02/07/11 10:14	
Oil and Grease	93 mg/l	7	IB10732	EPA 1664	DRB	02/07/11 10:14	
Nitrogen, Kjeldahl, total	101 mg/l	6.67	IB11151	EPA 351.2	DRB	02/15/11 12:00	
Solids, total suspended	1440 mg/l	50	IB11010	USGS I-3765-85	LJG	02/10/11 8:11	
Molybdenum, total	0.041 mg/l	0.010	IB10755	EPA 200.7	SAA	02/08/11 17:30	
Flow	27290 Gallons	1.0000	IB10876	Flow	JRP	02/04/11 11:25	
pH	7.9 pH	0.5	IB10876	SM 4500 H+ B	JRP	02/04/11 11:25	
Temperature	12.8 °C	0.00	IB10876	SM 2550 B	JRP	02/04/11 11:25	

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February 15, 2011
Page 2 of 15

Work Order: 11B0159

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B10422 - General Prep Micro										
Blank (1B10422-BLK1) Prepared & Analyzed: 02/04/11										
CBOD (5 day)	ND	4	mg/l							
Duplicate (1B10422-DUP2)		Source: 11B0182-01			Prepared & Analyzed: 02/04/11					
CBOD (5 day)	301	4	mg/l		300			0.333	30	
Reference (1B10422-SRM1) Prepared & Analyzed: 02/04/11										
CBOD (5 day)	436	4	mg/l		410.520	106	84.6-115.4			
Batch 1B10732 - Wet Chem Preparation										
Blank (1B10732-BLK1) Prepared & Analyzed: 02/07/11										
Oil and Grease	ND	4	mg/l							
Oil/Grease, animal/vegetable	ND	4	"							
Oil/Grease, petroleum	ND	4	"							
LCS (1B10732-BS1) Prepared & Analyzed: 02/07/11										
Oil and Grease	37	4	mg/l		40.0000	92.5	78-114			
Oil/Grease, animal/vegetable	22	4	"		20.0000	108	64-132			
Oil/Grease, petroleum	15	4	"		20.0000	76.5	64-132			
Matrix Spike (1B10732-MS1) Source: 11B0024-01 Prepared & Analyzed: 02/07/11										
Oil and Grease	109	4	mg/l		43.2900	72	86.1	78-114		
Oil/Grease, animal/vegetable	91	4	"		21.6450	71	93.8	64-132		
Oil/Grease, petroleum	18	4	"		21.6450	0.9	78.4	64-132		
Matrix Spike Dup (1B10732-MSD1) Source: 11B0024-01 Prepared & Analyzed: 02/07/11										
Oil and Grease	114	4	mg/l		44.3459	72	95.5	78-114	4.57	18
Oil/Grease, animal/vegetable	96	4	"		22.1730	71	113	64-132	4.99	34
Oil/Grease, petroleum	18	4	"		22.1730	0.9	78.5	64-132	2.41	34

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Work Order: 11B0159

February 15, 2011
Page 3 of 15

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1B10762 - Wet Chem Preparation

Blank (1B10762-BLK1)

Chemical Oxygen Demand ND 10 mg/l Prepared: 02/07/11 Analyzed: 02/08/11

LCS (1B10762-BS1)

Chemical Oxygen Demand 67.5 10 mg/l 77.3250 87.3 87-115 Prepared: 02/07/11 Analyzed: 02/08/11

Matrix Spike (1B10762-MS1)

Chemical Oxygen Demand Source: 11B0158-01 Prepared: 02/07/11 Analyzed: 02/08/11

3470 1000 mg/l 3866.25 1060 62.3 60-140

Matrix Spike Dup (1B10762-MSD1)

Chemical Oxygen Demand Source: 11B0158-01 Prepared: 02/07/11 Analyzed: 02/08/11

3500 1000 mg/l 3866.25 1060 63.1 60-140 0.888 26

Batch 1B10820 - Wet Chem Preparation

Blank (1B10820-BLK1)

Nitrogen, Ammonia ND 1.0 mg/l Prepared & Analyzed: 02/08/11

LCS (1B10820-BS1)

Nitrogen, Ammonia 10.0 1.0 mg/l 10.0000 99.5 86-110 Prepared & Analyzed: 02/08/11

Matrix Spike (1B10820-MS1)

Nitrogen, Ammonia Source: 11B0148-02 Prepared & Analyzed: 02/08/11

10.1 1.0 mg/l 10.0000 ND 101 82-110

Matrix Spike Dup (1B10820-MSD1)

Nitrogen, Ammonia Source: 11B0148-02 Prepared & Analyzed: 02/08/11

9.8 1.0 mg/l 10.0000 ND 98.1 82-110 2.81 10

Reference (1B10820-SRM1)

Nitrogen, Ammonia 9.8 1.0 mg/l 10.0000 98.1 75-125 Prepared & Analyzed: 02/08/11

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2800 E. 13th St.
Ames, IA 50010

February 15, 2011
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Work Order: 11B0159

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1B11010 - Wet Chem Preparation

Blank (1B11010-BLK1)					Prepared & Analyzed: 02/10/11				
Solids, total suspended	ND	1	mg/l						
LCS (1B11010-BSI)					Prepared & Analyzed: 02/10/11				
Solids, total suspended	13.5	1	mg/l	15,000	90.0	75-114			

Duplicate (1B11010-DUP1)

Solids, total suspended	2170	100	mg/l	2160			0,462	30
-------------------------	------	-----	------	------	--	--	-------	----

Batch 1B11043 - Wet Chem Preparation

Blank (1B11043-BLK1)					Prepared & Analyzed: 02/11/11				
Cyanide, total	ND	0.007	mg/l						
LCS (1B11043-BSI)					Prepared & Analyzed: 02/11/11				
Cyanide, total	0.020	0.007	mg/l	0.0199974	98.3	90-124			
Matrix Spike (1B11043-MSI)				Source: 11B0382-01	Prepared & Analyzed: 02/11/11				
Cyanide, total	0.031	0.007	mg/l	0.0199974	0.011	102	80-125		
Matrix Spike Dup (1B11043-MSD1)				Source: 11B0382-01	Prepared & Analyzed: 02/11/11				
Cyanide, total	0.031	0.007	mg/l	0.0199974	0.011	97.4	80-125	2.96	13

Batch 1B11151 - Wet Chem Preparation

Blank (1B11151-BLK1)					Prepared & Analyzed: 02/15/11				
Nitrogen, Kjeldahl, total	ND	0.50	mg/l						

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Ames, IA 50010

Work Order: 11B0159

February 15, 2011
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Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B11151 - Wet Chem Preparation										
LCS (1B11151-BS1)										
Nitrogen, Kjeldahl, total	19.9	0.50	mg/l	20.000	99.5		84-120			
Matrix Spike (1B11151-MS1)										
Nitrogen, Kjeldahl, total	10.5	0.50	mg/l	10.000	1.60	89.2	83-129			
Matrix Spike Dup (1B11151-MSD1)										
Nitrogen, Kjeldahl, total	11.1	0.50	mg/l	10.000	1.60	95.0	83-129	5.37	10	

ARNDT/PARK/2011

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Phone 641-792-8451

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Sauer-Danfoss
2800 E. 13th St.
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February 15, 2011
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Work Order: 11B0159

Determination of Total Metals - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1B10755 - EPA 3010A Total ICP										
Blank (1B10755-BLK1)	ND	0.010	mg/l				Prepared: 02/07/11 Analyzed: 02/08/11			
Molybdenum, total										
LCS (1B10755-BSI)	0.215	0.010	mg/l	0.200000		108	85-115			
Molybdenum, total										
Matrix Spike (1B10755-MS1)	0.207	0.010	mg/l	0.200000	0.00497	101	70-130			
Molybdenum, total										
Matrix Spike Dup (1B10755-MSD1)	0.212	0.010	mg/l	0.200000	0.00497	103	70-130	2.32	20	
Molybdenum, total										
Post Spike (1B10755-PS1)	0.210		mg/l	0.200000	0.00492	103	85-115			
Molybdenum, total										

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

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Work Order: 11B0159

February 15, 2011
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Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
<i>4500CN-E in Water</i>		
<i>EPA 1664 In Water</i>	Cyanide, total	IA-NT,KS-NT,NELAC
	Oil and Grease	IA-NT,KS-NT,NELAC
	Oil/Grease, animal/vegetable	IA-NT,KS-NT,NELAC
	Oil/Grease, petroleum	IA-NT,KS-NT,NELAC
<i>EPA 200.7 in Water</i>		
<i>EPA 351.2 in Water</i>	Molybdenum, total	SIA1X
<i>EPA 410.4 in Water</i>	Nitrogen, Kjeldahl, total	SIA1X
<i>SM 2550 B In Water</i>	Chemical Oxygen Demand	IA-NT,KS-NT,NELAC
<i>SM 4500-NH3 B,E in Water</i>	Temperature	SIA1X
<i>SM 5210 B In Water</i>	Nitrogen, Ammonia	KS-NT,NELAC
<i>USGS I-3765-85 in Water</i>	CBOD (5 day)	SIA1X
	Solids, total suspended	SIA1X

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2011
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2011
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2011
SIA1X	Iowa Department of Natural Resources	95	02/01/2012

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Work Order: 11B0159

February 15, 2011
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End of Report

Sue Thompson

Keystone Laboratories, Inc.

Sue Thompson
Project Manager I

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Work Order: 11B0159

February 15, 2011
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Printed: 2/3/2011 4:15:54PM

CHAIN OF CUSTODY RECORD

Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451
FAX: 641-792-7989

SITE INFORMATION

Sampler: *Pryke*

Project: Quarterly Waste Pretreatment
Pretreatment

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by / /

REPORT TO

Gary Erickson
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

INVOICE TO

Accounts Payable
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

LAB USE ONLY

Work Order 11B0159

Temperature

Turn-Cooler: No

- Custody Seal
- Containers Intact
- COC/Labels Agree
- Preservation Confirmed
- Received On Ice

Number	Sample Identification / Client ID	Matrix	Type	Date	Time	Temp	Flow	pH	Analyses	Lab Sample Number
01-001	Front Parking Lot North Manhole	Water		2/4/11	11:25				temperature mo-t-200,7 chud-5210 cod-410,4 tkn-351,2 flow-total	og-profil-c-1664 nh3-4500bc cn-1-4500c ph-field-4500 iss-i-3765-R5 01

Jean R. Lyle 2/4/11 12:45

Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Received for Lab By Date/Time

Remarks:

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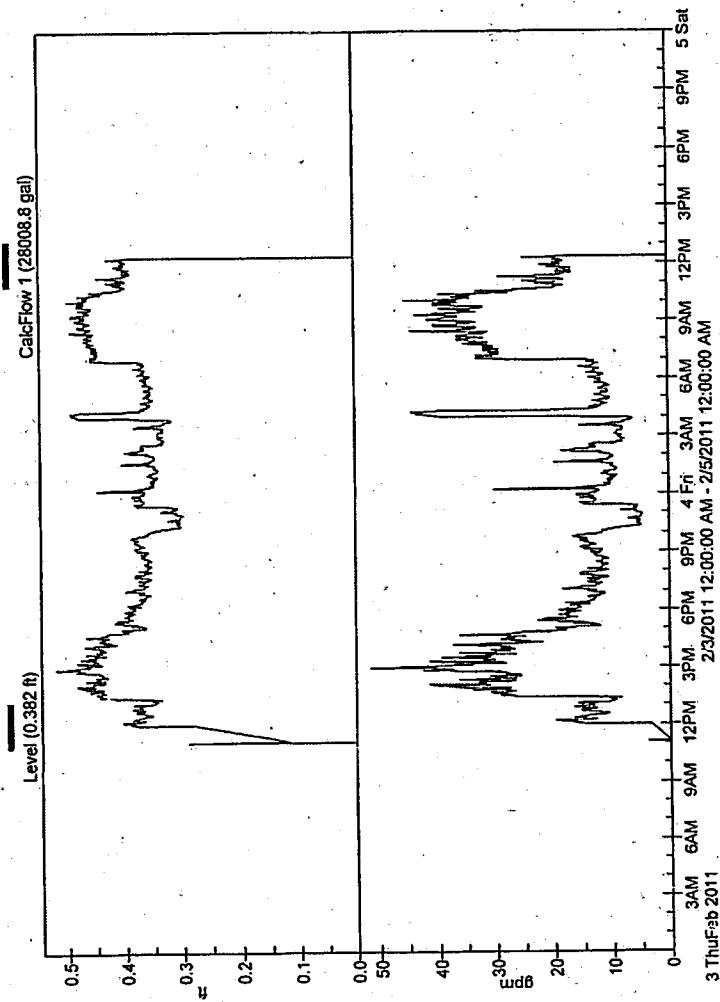
Sauer-Danfoss
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Ames, IA 50010

Work Order: 11B0159

February 15, 2011
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11B0159

SAUR-DANFO
Flowlink 5



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2800 E. 13th St.
Ames, IA 50010

Work Order: 11B0159

February 15, 2011
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SD0211

SAMPLER ID# 1182518539 12:37 4-FEB-11
Hardware: A1 Software: 2.31
***** PROGRAM SETTINGS *****

SITE DESCRIPTION:
"SAUR-DANFO"

UNITS SELECTED:
FLOW RATE: gpm
FLOW VOLUME: gal

BUBBLER MODULE:
FLOW-INSERT
8"
V-NOTCH

1, 9.80 lit BTLS
25 ft SUCTION LINE

PACING:
FLOW, EVERY
300.0 gal

COMPOSITE:
120 SAMPLES

70 ml SAMPLES

NO DELAY TO START
24 HOURS RUN TIME

SAMPLER ID# 1182518539 12:37 4-FEB-11
Hardware: A1 Software: 2.31
***** SAMPLING RESULTS *****
SITE: SAUR-DANFO
Program Started at 11:59 TH 3-FEB-11
Nominal Sample Volume = 70 ml

SAMPLE	BOTTLE	TIME	SOURCE	ERROR	COUNT	TO LIQUID
11:59			PGM	ENABLED		
1	1	12:18	F		827	
2	1	12:41	F		830	
3	1	13:02	F		834	
4	1	13:26	F		832	

Page 1

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2800 E. 13th St.
Ames, IA 50010

Work Order: 11B0159

February 15, 2011
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SD0211			
5	1	13:36	F
6	1	13:47	F
7	1	13:56	F
8	1	14:04	F
9	1	14:14	F
10	1	14:24	F
11	1	14:35	F
12	1	14:45	F
13	1	14:53	F
14	1	15:00	F
15	1	15:08	F
16	1	15:17	F
17	1	15:26	F
18	1	15:35	F
19	1	15:44	F
20	1	15:54	F
21	1	16:05	F
22	1	16:15	F
23	1	16:27	F
24	1	16:37	F
25	1	16:48	F
26	1	17:04	F
27	1	17:23	F
28	1	17:40	F
29	1	17:57	F
30	1	18:16	F
31	1	18:38	F
32	1	19:02	F
33	1	19:23	F
34	1	19:47	F
35	1	20:10	F
36	1	20:37	F
37	1	21:01	F
38	1	21:23	F
39	1	21:43	F
40	1	22:07	F
41	1	22:59	F
42	1	23:33	F
43	1	23:56	F
FR 04-FEB-11			
44	1	00:15	F
45	1	00:41	F
46	1	01:11	F
47	1	01:40	F
48	1	02:08	F
49	1	02:29	F
50	1	03:01	F
51	1	03:33	F
52	1	04:01	F
53	1	04:08	F
54	1	04:15	F
55	1	04:31	F
56	1	04:57	F
57	1	05:25	F
58	1	05:51	F
59	1	06:16	F
60	1	06:39	F
61	1	06:59	F
62	1	07:09	F
63	1	07:18	F
64	1	07:28	F
65	1	07:38	F
66	1	07:47	F

Page 2

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Work Order: 11B0159

February 15, 2011
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SD0211
67 1 07:57 F 832
68 1 08:05 F 825
69 1 08:14 F 825
70 1 08:23 F 824
71 1 08:31 F 827
72 1 08:40 F 825
73 1 08:47 F 833
74 1 08:56 F 825
75 1 09:04 F 830
76 1 09:12 F 832
77 1 09:19 F 836
78 1 09:27 F 836
79 1 09:36 F 838
80 1 09:44 F 836
81 1 09:53 F 833
82 1 10:00 F 836
83 1 10:08 F 840
84 1 10:16 F 838
85 1 10:25 F 846
86 1 10:35 F 842
87 1 10:50 F 844
88 1 11:04 F 838
89 1 11:18 F 845
90 1 11:34 F 842
91 1 11:50 F 844
11:59 PGM DONE 04-FEB

SOURCE F ==> FLOW

SAMPLER ID# 1182518539 12:38 4-FEB-11
Hardware: A1 Software: 2.31
BUBBLER MODULE: 1160556497
Hardware: A0 Software: 1.07
*****COMBINED RESULTS*****
SITE: SAUR-DANFO
Program Started at 11:59 TH 3-FEB-11
Nominal Sample Volume = 70 ml

SAMPLE	BOTTLE	TIME	LEVEL	FLOW	TOTAL
			ft	gpm	gal
1	1	12:18	0.384	15.79	0000000300
2	1	12:41	0.374	14.07	0000000600
3	1	13:02	0.381	15.20	0000000890
4	1	13:26	0.433	26.42	0000001190
5	1	13:36	0.446	29.88	0000001490
6	1	13:47	0.459	33.95	0000001790
7	1	13:56	0.466	36.17	0000002100
8	1	14:04	0.466	36.17	0000002400
9	1	14:14	0.436	27.26	0000002690
10	1	14:24	0.433	26.42	0000002990
11	1	14:35	0.440	28.11	0000003290
12	1	14:45	0.449	30.79	0000003600
13	1	14:53	0.472	38.31	0000003900
14	1	15:00	0.489	43.35	0000004200
15	1	15:08	0.466	36.17	0000004490
16	1	15:17	0.482	41.38	0000004800
17	1	15:26	0.456	32.86	0000005100

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Keystone

LABORATORIES, INC.



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2800 E. 13th St.
Ames, IA 50010

Work Order: 11B0159

February 15, 2011
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					SD0211
18	1	15:35	0.463	35.08	0000005400
19	1	15:44	0.456	32.86	0000005700
20	1	15:54	0.436	27.26	0000006000
21	1	16:05	0.446	29.88	0000006300
22	1	16:15	0.427	24.80	0000006600
23	1	16:27	0.443	28.99	0000006900
24	1	16:37	0.449	30.79	0000007200
25	1	16:48	0.427	24.80	0000007490
26	1	17:04	0.384	15.79	0000007790
27	1	17:23	0.417	22.48	0000008090
28	1	17:40	0.390	17.01	0000008400
29	1	17:57	0.397	18.29	0000008700
30	1	18:16	0.374	14.07	0000009000
31	1	18:38	0.364	12.46	0000009300
32	1	19:02	0.381	15.20	0000009590
33	1	19:23	0.374	14.07	0000009890
34	1	19:47	0.381	15.20	0000010190
35	1	20:10	0.358	11.46	0000010490
36	1	20:37	0.354	10.99	0000010790
37	1	21:01	0.358	11.46	0000011090
38	1	21:23	0.371	13.52	0000011390
39	1	21:43	0.387	16.39	0000011690
40	1	22:07	0.351	10.52	0000011990
41	1	22:59	0.308	5.535	0000012290
42	1	23:33	0.367	12.99	0000012390
43	1	23:56	0.381	15.20	0000012890
			FR	4-FEB-11	
44	1	00:15	0.410	21.02	0000013190
45	1	00:41	0.351	10.52	0000013490
46	1	01:11	0.341	9.196	0000013790
47	1	01:40	0.367	12.99	0000014090
48	1	02:08	0.358	11.46	0000014390
49	1	02:29	0.371	13.52	0000014690
50	1	03:01	0.335	8.368	0000014990
51	1	03:33	0.367	12.99	0000015290
52	1	04:01	0.482	41.38	0000015600
53	1	04:08	0.489	43.35	0000015890
54	1	04:15	0.486	42.37	0000016200
55	1	04:31	0.371	13.52	0000016490
56	1	04:57	0.351	10.52	0000016790
57	1	05:25	0.361	11.96	0000017090
58	1	05:51	0.358	11.46	0000017390
59	1	06:16	0.374	14.07	0000017690
60	1	06:39	0.367	12.99	0000017990
61	1	06:59	0.453	31.78	0000018290
62	1	07:09	0.446	29.88	0000018590
63	1	07:18	0.449	30.79	0000018890
64	1	07:28	0.446	29.88	0000019190
65	1	07:38	0.446	29.88	0000019490
66	1	07:47	0.459	33.96	0000019790
67	1	07:57	0.459	33.96	0000020090
68	1	08:05	0.459	33.96	0000020390
69	1	08:14	0.466	36.17	0000020690
70	1	08:23	0.453	31.78	0000020990
71	1	08:31	0.466	36.17	0000021290
72	1	08:40	0.466	36.17	0000021590
73	1	08:47	0.466	36.17	0000021890
74	1	08:56	0.459	33.96	0000022190
75	1	09:04	0.482	41.38	0000022490
76	1	09:12	0.472	38.31	0000022790
77	1	09:19	0.482	41.38	0000023090
78	1	09:27	0.459	33.96	0000023390

Page 4

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11B0159

February 15, 2011
Page 15 of 15

					SD0211
79	1	09:36	0.466	36.17	0000023690
80	1	09:44	0.453	31.78	0000023990
81	1	09:53	0.469	37.25	0000024290
82	1	10:00	0.469	37.25	0000024590
83	1	10:08	0.472	38.31	0000024890
84	1	10:16	0.463	35.08	0000025190
85	1	10:25	0.449	30.79	0000025490
86	1	10:35	0.433	26.42	0000025790
87	1	10:50	0.394	17.64	0000026090
88	1	11:04	0.417	22.48	0000026390
89	1	11:18	0.440	28.11	0000026690
90	1	11:34	0.394	17.64	0000026990
91	1	11:50	0.400	18.95	0000027290

SAMPLER ID# 1182518539 12:39 4-FEB-11
Hardware: A1 Software: 2.31
***** COMBINED RESULTS *****
SITE: SAUR-DANFO
Program Started at 11:59 TH 3-FEB-11
Nominal Sample Volume = 70 ml
FR-TEMP

SAMPLE BOTTLE TIME C

NO FR-TEMPERATURE

SAMPLER ID# 1182518539 12:39 4-FEB-11
Hardware: A1 Software: 2.31
***** COMBINED RESULTS *****
SITE: SAUR-DANFO
Program Started at 11:59 TH 3-FEB-11
Nominal Sample Volume = 70 ml
SAMPLE BOTTLE TIME

NO RAIN GAUGE

SAMPLER ID# 1182518539 12:39 4-FEB-11
Hardware: A1 Software: 2.31
SDI-12 DATA
***** COMBINED RESULTS *****
SITE: SAUR-DANFO
Program Started at 11:59 TH 3-FEB-11
Nominal Sample Volume = 70 ml

NO SDI-12 SONDE

Page 5

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Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Keystone Analytical Report

3/16/11



ANALYTICAL REPORT

March 22, 2011

Page 1 of 4

Work Order: 11C0844

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information
Date Received: 03/16/2011 11:30AM
Collector: Pryke
Phone: (515) 239-6539
PO Number: 4501784596

Project : Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11C0844-01	Front Parking Lot North Manhole			Matrix:Water		Collected:	03/16/11 08:35
CBOD (5 day)	1580 mg/l	4	IC11701	SM 5210 B	JRP	03/16/11 15:28	
Chemical Oxygen Demand	1950 mg/l	500	IC12110	EPA 410.4	SAI	03/21/11 15:39	
Flow	32720 Gallons	1.0000	IC11760	Flow	JRP	03/16/11 8:35	
pH	7.5 pH	0.5	IC11760	SM 4500 H+ B	JRP	03/16/11 8:35	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

March 22, 2011
Page 2 of 4

Work Order: 11C0844

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1C11701 - General Prep Micro										
Blank (1C11701-BLK1)										
CBOD (5 day)	ND	4	mg/l				Prepared & Analyzed: 03/16/01			
Duplicate (1C11701-DUP1)		Source: 11C0860-03					Prepared & Analyzed: 03/16/01			
CBOD (5 day)	87.0	4	mg/l		73.0			17.5	30	
Batch 1C12110 - Wet Chem Preparation										
Blank (1C12110-BLK1)										
Chemical Oxygen Demand	ND	10	mg/l				Prepared & Analyzed: 03/21/11			
LCS (1C12110-BS1)							Prepared & Analyzed: 03/21/11			
Chemical Oxygen Demand	67.8	10	mg/l	77.3250		87.7	87-115			
Matrix Spike (1C12110-MS1)		Source: 11C0889-01					Prepared & Analyzed: 03/21/11			
Chemical Oxygen Demand	129	40	mg/l	154.650	ND	83.3	60-140			
Matrix Spike Dup (1C12110-MSD1)		Source: 11C0889-01					Prepared & Analyzed: 03/21/11			
Chemical Oxygen Demand	163	40	mg/l	154.650	ND	106	60-140	23.7	26	

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
EPA 410.4 in Water		
	Chemical Oxygen Demand	IA-NT,KS-NT,NELAC
SM 5210 B in Water		
	CBOD (5 day)	SIA1X
Code	Description	Number
KS-KC	Kansas Department of Health and Environment-KC	E-10110
KS-NT	Kansas Department of Health and Environment	E-10287
NELAC	New Jersey Department of Environmental Protection	IA001
SIA1X	Iowa Department of Natural Resources	95
		Expires
		04/30/2011
		10/30/2011
		06/30/2011
		02/01/2012

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2800 E. 13th St.
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Work Order: 11C0844

March 22, 2011
Page 3 of 4

End of Report

A handwritten signature in cursive script that reads "Sue Thompson".

Keystone Laboratories, Inc.

Sue Thompson
Project Manager I

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Keystone

LABORATORIES, INC.



M E M B E R
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11C0844

March 22, 2011
Page 4 of 4

Page 1 of 1

Printed: 3/15/2011 2:31:28PM

CHAIN OF CUSTODY RECORD

Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451
FAX: 641-792-7989

REPORT TO

Gary Erickson
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

INVOICE TO

Accounts Payable
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

SITE INFORMATION

Sampler: Ryke

Project: Quarterly Waste Pretreatment
Pretreatment

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by /

LAB USE ONLY

Work Order 11C0844

Temperature

Turn-Cooler: No

- Custody Seal
- Containers Intact
- COC/Labels Agree
- Preservation Confirmed
- Received On Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Temp	Flow	pH	Analyses	Lab Sample Number
01-001	Front Parking Lot North Manhole	Water		3/16/11	8:35				b1-mv0000 cbod-5210 cdt-410.4 flow-total ph-field-4500	0

Jer R. Ryke 3/16/11 11:30

Relinquished By Date/Time

Received By Date/Time

Relinquished By D. Denning Date/Time 3/16/11 11:30
Received for Lab By Date/Time

Remarks:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

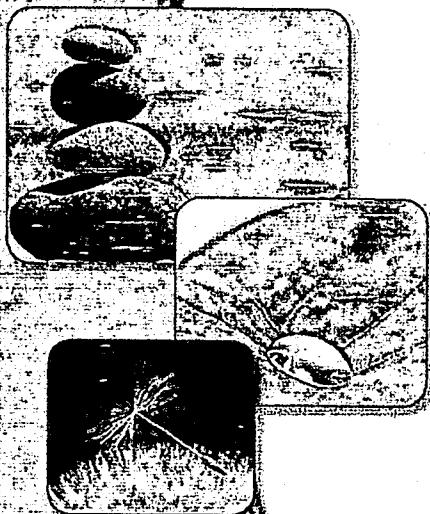
Fax 641-792-7989

Test America Analytical Report

2/22/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-31065-1

TestAmerica Sample Delivery Group: 500-31065-1

Client Project/Site: 11-233

For:

Fehr-Graham & Associates

221 E. Main Street, Suite 200

Freeport, Illinois 61032-4201

Attn: Amy Schneiderman

Authorized for release by:

03/02/2011 03:17:26 PM

Donna Ingersoll

Project Manager II

donna.ingersoll@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Case Narrative

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Job ID: 500-31065-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-31065-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

TestAmerica Chicago

03/02/2011

Detection Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Client Sample ID: 28765-1ST QTR

Lab Sample ID: 500-31065-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0047		0.0010	0.00024	mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0092		0.0010	0.00029	mg/L	1		8260B	Total/NA
1,1,1-Trichloroethane	0.032		0.0010	0.00026	mg/L	1		8260B	Total/NA
Trichloroethene	0.015		0.00050	0.00018	mg/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.00038	J	0.0010	0.00027	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.035		0.0010	0.00022	mg/L	1		8260B	Total/NA
Tetrachloroethene - DL	0.40		0.010	0.0022	mg/L	10		8260B	Total/NA

Method Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-31065-1	28765-1ST QTR	Water	02/22/11 08:40	02/23/11 10:15

Analytical Data

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Client Sample ID: 28765-1ST QTR

Date Collected: 02/22/11 08:40

Date Received: 02/23/11 10:15

Lab Sample ID: 500-31065-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0019	mg/L			03/01/11 15:59	1
1,1-Dichloroethane	0.0047		0.0010	0.00024	mg/L			03/01/11 15:59	1
1,1-Dichloroethene	0.0092		0.0010	0.00029	mg/L			03/01/11 15:59	1
1,1,1-Trichloroethane	0.032		0.0010	0.00026	mg/L			03/01/11 15:59	1
Trichloroethene	0.015		0.00050	0.00018	mg/L			03/01/11 15:59	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			03/01/11 15:59	1
trans-1,2-Dichloroethene	0.00038	J	0.0010	0.00027	mg/L			03/01/11 15:59	1
cis-1,2-Dichloroethene	0.035		0.0010	0.00022	mg/L			03/01/11 15:59	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	99		77-112					03/01/11 15:59	1
Dibromofluoromethane	98		78-119					03/01/11 15:59	1
1,2-Dichloroethane-d4 (Sur)	101		77-124					03/01/11 15:59	1
Toluene-d8 (Sur)	100		80-121					03/01/11 15:59	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.40		0.010	0.0022	mg/L			03/01/11 16:23	10
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	95		77-112					03/01/11 16:23	10
Dibromofluoromethane	95		78-119					03/01/11 16:23	10
1,2-Dichloroethane-d4 (Sur)	99		77-124					03/01/11 16:23	10
Toluene-d8 (Sur)	97		80-121					03/01/11 16:23	10

Qualifier Definition/Glossary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Glossary

Glossary	Glossary Description
	Listed under the "D" column to designate that the result is reported on a dry weight basis.

QC Association Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

GC/MS VOA

Analysis Batch: 106545

Lab Sample ID	Client Sample ID	Prop Type	Matrix	Method	Prep Batch
500-31065-1	28765-1ST QTR	Total/NA	Water	8260B	
500-31065-1 - DL	28765-1ST QTR	Total/NA	Water	8260B	
MB 500-106545/3	MB 500-106545/3	Total/NA	Water	8260B	
LCS 500-106545/4	LCS 500-106545/4	Total/NA	Water	8260B	



Surrogate Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (77-112)	DBFM (78-119)	12DCE (77-124)	TOL (80-121)
500-31065-1	28765-1ST QTR	99	98	101	100
500-31065-1 - DL	28765-1ST QTR	95	95	99	97
LCS 500-106545/4	LCS 500-106545/4	96	97	95	96
MB 500-106545/3	MB 500-106545/3	99	95	96	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

Quality Control Data

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-31065-1
SDG: 500-31065-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-106545/3

Matrix: Water

Analysis Batch: 106545

Client Sample ID: MB 500-106545/3
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<0.0050		0.0050	0.0019	mg/L			03/01/11 13:10	1
1,1-Dichloroethane	<0.0010		0.0010	0.00024	mg/L			03/01/11 13:10	1
1,1-Dichloroethene	<0.0010		0.0010	0.00029	mg/L			03/01/11 13:10	1
m&p-Xylene	<0.0010		0.0010	0.00030	mg/L			03/01/11 13:10	1
o-Xylene	<0.00050		0.00050	0.00013	mg/L			03/01/11 13:10	1
Tetrachloroethene	<0.0010		0.0010	0.00022	mg/L			03/01/11 13:10	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00026	mg/L			03/01/11 13:10	1
Trichloroethene	<0.00050		0.00050	0.00018	mg/L			03/01/11 13:10	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			03/01/11 13:10	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00027	mg/L			03/01/11 13:10	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00022	mg/L			03/01/11 13:10	1
Surrogate	MB	MB	% Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	99		77 - 112					03/01/11 13:10	1
Dibromofluoromethane	95		78 - 119					03/01/11 13:10	1
1,2-Dichloroethane-d4 (Sur)	96		77 - 124					03/01/11 13:10	1
Toluene-d8 (Sur)	99		80 - 121					03/01/11 13:10	1

Lab Sample ID: LCS 500-106545/4

Matrix: Water

Analysis Batch: 106545

Client Sample ID: LCS 500-106545/4
Prep Type: Total/NA

Analyte	Spike	LCS	LCS	Unit	D	% Rec.	Limits
	Added	Result	Qualifier				
Acetone	0.0500	0.0514		mg/L		103	43 - 153
1,1-Dichloroethane	0.0500	0.0467		mg/L		93	64 - 117
1,1-Dichloroethene	0.0500	0.0433		mg/L		87	60 - 126
m&p-Xylene	0.100	0.0981		mg/L		98	77 - 117
o-Xylene	0.0500	0.0498		mg/L		100	74 - 117
Tetrachloroethene	0.0500	0.0483		mg/L		97	76 - 114
1,1,1-Trichloroethane	0.0500	0.0480		mg/L		96	66 - 128
Trichloroethene	0.0500	0.0476		mg/L		95	75 - 116
Xylenes, Total	0.150	0.148		mg/L		99	74 - 117
trans-1,2-Dichloroethene	0.0500	0.0479		mg/L		96	67 - 120
cis-1,2-Dichloroethene	0.0500	0.0456		mg/L		91	66 - 111
Surrogate	LCS	LCS	% Recovery	Qualifier	Limits	D	% Rec.
4-Bromofluorobenzene (Sur)	96	77 - 112					
Dibromofluoromethane	97	78 - 119					
1,2-Dichloroethane-d4 (Sur)	95	77 - 124					
Toluene-d8 (Sur)	96	80 - 121					

TestAmerica Chicago

03/02/2011

Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
Chicago Office - PO Box 2116 - Crystal Lake, IL 60039-2116 - Phone (847) 651-2604 - Facsimile (847) 458-9680

www.prairieanalytical.com



500-31065

Login Sample Receipt Check List

Client: Fehr-Graham & Associates

Job Number: 500-31065-1
SDG Number: 500-31065-1

Login Number: 31065

Creator: James, Jeff A

List Number: 1

List Source: TestAmerica Chicago

Question	T / F / NA	Comment
Radioactivity either was not measured or, if measured, is at or below background.	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



FEHR-GRAHAM & ASSOCIATES
Engineering & Science Consultants

SOLUTIONS SINCE 1973

CERTIFIED MAIL NUMBER: 7010 1670 0002 5129 4858
RETURN RECEIPT REQUESTED

221 E Main St Suite 200
Freeport IL 61032
ph 815 235 7643
fax 815 235 4632
www.fehr-graham.com

FILE COPY

July 7, 2011

City of Ames, Iowa
Water and Pollution Control Department
300 East Fifth Street, Building 1
Ames, IA 50010

RE: Non-Domestic Waste Pretreatment Program Quarterly Report – 2nd Quarter 2011
Sauer-Danfoss (US) Company
2800 East 13th Street
Ames, IA 50010
Facility Permit No. 6593-7

Dear Sir/Madam:

Enclosed, please find the Non-Domestic Waste Pretreatment Program Quarterly Report for wastewater discharge from the above-referenced facility for the 2nd quarter of 2011. Also enclosed are copies of the analytical reports from Keystone Labs and Test America for the analysis of wastewater and groundwater remediation respectively and a summary of monthly flow in gals/month from the groundwater remediation project.

Please note that the sample collected April 5, 2011, returned a violation for COD of 3,810 mg/l with a permit limit of 2,500 mg/l. A second violation for CBOD of 1,980 mg/l with a permit limit of 1,500 mg/l was also noted. A sample collected April 26, 2011, returned results below the permitted limits. These results were submitted to Mr. Hawes, of the City of Ames, on May 3rd, 2011. Per the direction of Mr. Hawes, the original result is reported here, and the analytical reports for both are attached.

Should you have any questions regarding these documents, please do not hesitate to contact this office.

Sincerely,

Amy Schneiderman

Amy L. Schneiderman
Environmental Specialist

ALS:mll
K:\Sec\SEC 2011\11-313\ALS 11-313 - 2nd Qtr Wastewater to City of Ames.doc
Enclosure

cc: Sauer-Danfoss (with enclosure)

Non-Domestic Waste Pretreatment Program

Quarterly Report

(Non-Significant, Non-Domestic Contributor)

2nd Quarter 2011

Reporting Period: 4/1/2011 to 6/30/2011

Submit results on or before the 10th of the month following the end of the quarter

Facility: Sauer-Danfoss

Permit No: 6593-7

Facility Contact: Gary Erickson

Facility Phone No: 515-239-6000

Sampling Location: Front Parking Lot North Manhole (Wastewater)/On-Site Wastewater Treatment

Sample Port (GW Remediation)

Sample Type: Grab & 24 Hour Composite

Sample Date: 5/23/11 (GW Remediation) / 4/5/11 (Wastewater)

Analyte	Permit Limit Mg/L	Sample Results Mg/L
Facility	Sauer Danfoss 2800 East 13th	Sauer Danfoss 2800 East 13th
Flow	Gals/Day	35,340
pH	6-10 pH	7.90
TSS	1,500	1,110
Cyanide	0.55	<0.007
Ammonia (NH3)	200	17.8
Total Kjeldahl Nitrogen (TKN)	250	97.6
Oil & Grease	300	186
CBOD 5	1,500	1,980
COD	2,500	3,810
Molybdenum	0.19	<0.010
GW remediation		Max Expected Concentration ug/L
Flow (remediation)	Gals/Quart	1,133,721
Acetone	44	<5
1,1-Dichloroethane	370	3.2
1,1-Dichloroethene	170	6.6
cis-1,2-Dichloroethene	490	20
Tetrachloroethene	1700	290
1,1,1-Trichloroethane	650	22
Trichloroethene	110	11
Total Xylenes	11	<1

Note: Please attach sample results from Laboratory

Process or Treatment Change: None

Additional Comments: Please see attached for Groundwater Remediation Flow Data.

Results for initial sample collection are reported above. Subsequent analysis was below permit limits for COD (471 mg/L) and CBOD (419 mg/L). Analytical reports for both are attached.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed Gary Erickson
Authorized Representative

Date 7-8-11

Sauer-Danfoss
Ames, IA
Groundwater Remediation Flow Data

April 2011	296,064
May 2011	435,233
June 2011	402,424
Total flow (gals) 2nd Quarter:	1,133,721
	12,458 gpd

of days in Quarter = 91

Keystone Analytical Report

4/5/11



ANALYTICAL REPORT

April 13, 2011

Work Order: 11D0165

Page 1 of 9

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information
Date Received: 04/05/2011 12:55PM
Collector: Pryke
Phone: (515) 239-6539
PO Number: 4501784596

Project : Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11D0165-01	Front Parking Lot North Manhole			Matrix:Water		Collected:	04/05/11 10:20
CBOD (5 day)	1980 mg/l	4	ID10527	SM 5210 B	JRP	04/06/11 7:00	
Cyanide, total	<0.007 mg/l	0.007	ID11104	4500CN-E	DRB	04/11/11 8:23	
Chemical Oxygen Demand	3810 mg/l	1000	ID10623	EPA 410.4	SAI	04/06/11 15:19	
Nitrogen, Ammonia	17.8 mg/l	1.0	ID10617	SM 4500-NH3 B,E	JDK	04/06/11 14:29	
Oil/Grease, animal/vegetable	183 mg/l	4	ID10603	EPA 1664	DRB	04/06/11 8:18	
Oil/Grease, petroleum	4 mg/l	4	ID10603	EPA 1664	DRB	04/06/11 8:18	
Oil and Grease	186 mg/l	4	ID10603	EPA 1664	DRB	04/06/11 8:18	PH-2
Nitrogen, Kjeldahl, total	97.6 mg/l	6.25	ID11134	EPA 351.2	DRB	04/12/11 14:25	
Solids, total suspended	1110 mg/l	20	ID10803	USGS I-3765-85	LJG	04/08/11 7:48	
Molybdenum, total	<0.010 mg/l	0.010	ID10752	EPA 200.7	SAA	04/12/11 17:16	
Flow	35340 Gallons	1.0000	ID11138	Flow	JRP	04/05/11 10:20	
pH	7.9 pH	0.5	ID11138	SM 4500 H+ B	JRP	04/05/11 10:20	
Temperature	17.4 °C	0.00	ID11138	SM 2550 B	JRP	04/05/11 10:20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

April 13, 2011

Page 2 of 9

Work Order: 11D0165

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1D10527 - General Prep Micro										
Blank (1D10527-BLK1)										
CBOD (5 day)	ND	4	mg/l							
					Prepared & Analyzed: 04/06/01					
Duplicate (1D10527-DUP1)										
CBOD (5 day)	52.0	4	mg/l							
					Source: 11D0169-01	Prepared & Analyzed: 04/06/01				
Duplicate (1D10527-DUP2)										
CBOD (5 day)	186	4	mg/l							
					Source: 11D0175-01	Prepared & Analyzed: 04/06/01				
Reference (1D10527-SRM1)										
CBOD (5 day)	396	4	mg/l							
					Prepared & Analyzed: 04/06/01					
Batch 1D10603 - Wet Chem Preparation										
Blank (1D10603-BLK1)										
Oil and Grease	ND	4	mg/l							
Oil/Grease, animal/vegetable	ND	4	mg/l							
Oil/Grease, petroleum	ND	4	mg/l							
LCS (1D10603-BS1)										
Oil and Grease	37	4	mg/l							
Oil/Grease, animal/vegetable	21	4	mg/l							
Oil/Grease, petroleum	16	4	mg/l							
					Prepared & Analyzed: 04/06/01					
LCS Dup (1D10603-BSD1)										
Oil and Grease	37	4	mg/l							
Oil/Grease, animal/vegetable	21	4	mg/l							
Oil/Grease, petroleum	16	4	mg/l							
					Prepared & Analyzed: 04/06/01					

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D0165

April 13, 2011
Page 3 of 9

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch 1D10603 - Wet Chem Preparation										
Matrix Spike (1D10603-MS1)										
Matrix Spike (1D10603-MS1)	Source: 11D0174-02				Prepared & Analyzed: 04/06/01					
Oil and Grease	47	4	mg/l	40.4040	47	NR	78-114			QM-08
Oil/Grease, animal/vegetable	25	4	"	20.2020	26	NR	64-132			QM-08
Oil/Grease, petroleum	22	4	"	20.2020	22	3.02	64-132			QM-08
Batch 1D10617 - Wet Chem Preparation										
Blank (1D10617-BLK1)										
Blank (1D10617-BLK1)					Prepared: 04/06/01	Analyzed: 04/06/11				
Nitrogen, Ammonia	ND	1.0	mg/l							
LCS (1D10617-BS1)										
LCS (1D10617-BS1)					Prepared: 04/06/01	Analyzed: 04/06/11				
Nitrogen, Ammonia	9.1	1.0	mg/l	10.0000		91.0	86-110			
Matrix Spike (1D10617-MS1)										
Matrix Spike (1D10617-MS1)	Source: 11D0159-01				Prepared: 04/06/01	Analyzed: 04/06/11				
Nitrogen, Ammonia	13.5	1.0	mg/l	10.0000	4.3	92.4	82-110			
Matrix Spike Dup (1D10617-MSD1)										
Matrix Spike Dup (1D10617-MSD1)	Source: 11D0159-01				Prepared: 04/06/01	Analyzed: 04/06/11				
Nitrogen, Ammonia	13.6	1.0	mg/l	10.0000	4.3	93.8	82-110	1.03	10	
Reference (1D10617-SRM1)										
Reference (1D10617-SRM1)					Prepared: 04/06/01	Analyzed: 04/06/11				
Nitrogen, Ammonia	9.2	1.0	mg/l	10.0000		92.4	75-125			
Batch 1D10623 - Wet Chem Preparation										
Blank (1D10623-BLK1)										
Blank (1D10623-BLK1)					Prepared: 04/06/01	Analyzed: 04/06/11				
Chemical Oxygen Demand	ND	10	mg/l							

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D0165

April 13, 2011
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Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D10623 - Wet Chem Preparation

LCS (1D10623-BS1)					Prepared: 04/06/01	Analyzed: 04/06/11				
Chemical Oxygen Demand	71.5	10	mg/l	77.3250	92.5	87-115				
Matrix Spike (1D10623-MS1)		Source: 11D0167-01			Prepared: 04/06/01	Analyzed: 04/06/11				
Chemical Oxygen Demand	193	40	mg/l	154.650	29.1	106	60-140			

Matrix Spike Dup (1D10623-MSD1)

Chemical Oxygen Demand	194	40	mg/l	154.650	29.1	107	60-140	0.638	26
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Batch 1D10803 - Wet Chem Preparation

Blank (1D10803-BLK1)					Prepared & Analyzed: 04/08/11					
Solids, total suspended	ND	1	mg/l							
LCS (1D10803-BS1)					Prepared & Analyzed: 04/08/11					
Solids, total suspended	13.9	1	mg/l	15.0000	92.7	75-114				

Duplicate (1D10803-DUP1)

Solids, total suspended	9.0	5	mg/l	12.0				28.6	30
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Batch 1D11104 - Wet Chem Preparation

Blank (1D11104-BLK1)					Prepared & Analyzed: 04/11/01					
Cyanide, total	ND	0.007	mg/l							
LCS (1D11104-BS1)					Prepared & Analyzed: 04/11/01					

Cyanide, total

0.020	0.007	mg/l	0.0199974	100	90-124
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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D0165

April 13, 2011
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Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1D11104 - Wet Chem Preparation										
Matrix Spike (1D11104-MS1)		Source: 11D0286-01			Prepared & Analyzed: 04/11/01					
Cyanide, total	0.027	0.007	mg/l	0.0199974	0.007	99.7	80-125			
Matrix Spike Dup (1D11104-MSD1)										
Cyanide, total	0.027	0.007	mg/l	0.0199974	0.007	104	80-125	2.96	13	
Batch 1D11134 - Wet Chem Preparation										
Blank (1D11134-BLK1)					Prepared & Analyzed: 04/12/11					
Nitrogen, Kjeldahl, total	ND	0.50	mg/l							
LCS (1D11134-BS1)										
Nitrogen, Kjeldahl, total	20.2	0.50	mg/l	20.000		101	84-120			
Matrix Spike (1D11134-MS1)		Source: 11D0114-11			Prepared & Analyzed: 04/12/11					
Nitrogen, Kjeldahl, total	110	2.50	mg/l	50.0000	58.6	103	83-129			
Matrix Spike Dup (1D11134-MSD1)		Source: 11D0114-11			Prepared & Analyzed: 04/12/11					
Nitrogen, Kjeldahl, total	111	2.50	mg/l	50.0000	58.6	105	83-129	0.832	10	

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

April 13, 2011

Page 6 of 9

Work Order: 11D0165

Determination of Total Metals - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1D10752 - EPA 3010A Total ICP										
Blank (1D10752-BLK1)										
Molybdenum, total	ND	0.010	mg/l							
LCS (1D10752-BS1)										
Molybdenum, total	0.231	0.010	mg/l	0.200000		116	85-115			QS-01
Matrix Spike (1D10752-MS1)										
Molybdenum, total	0.206	0.010	mg/l	0.200000	0.00485	101	70-130			
Matrix Spike Dup (1D10752-MSD1)										
Molybdenum, total	0.202	0.010	mg/l	0.200000	0.00485	98.4	70-130	2.29	20	
Post Spike (1D10752-PS1)										
Molybdenum, total	0.210		mg/l	0.200000	0.00480	103	85-115			

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D0165

April 13, 2011
Page 7 of 9

Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
<i>4500CN-E in Water</i>	Cyanide, total	IA-NT,KS-NT,NELAC
<i>EPA 1664 in Water</i>	Oil and Grease	IA-NT,KS-NT,NELAC
	Oil/Grease, animal/vegetable	IA-NT,KS-NT,NELAC
	Oil/Grease, petroleum	IA-NT,KS-NT,NELAC
<i>EPA 200.7 in Water</i>	Molybdenum, total	SIA1X
<i>EPA 351.2 in Water</i>	Nitrogen, Kjeldahl, total	SIA1X
<i>EPA 410.4 in Water</i>	Chemical Oxygen Demand	IA-NT,KS-NT,NELAC
<i>SM 2550 B in Water</i>	Temperature	SIA1X
<i>SM 4500-NH3 B,E in Water</i>	Nitrogen, Ammonia	KS-NT,NELAC
<i>SM 5210 B in Water</i>	CBOD (5 day)	SIA1X
<i>USGS I-3765-85 in Water</i>	Solids, total suspended	SIA1X

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2011
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2011
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2011
SIA1X	Iowa Department of Natural Resources	95	02/01/2012

Notes and Definitions

- PII-2 Insufficient preservative to adjust the sample pH to less than 2 or greater than 10.
- QM-08 Due to noted non-homogeneity of the QC sample matrix, the MS/MSD did not provide reliable results for accuracy and precision.
- QS-01 The blank spike recovery was outside acceptance limits. Batch accepted based on acceptable MS/MSD/RPD results.

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Keystone

LABORATORIES, INC.



MEMBER
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D0165

April 13, 2011
Page 8 of 9

End of Report

Sue Thompson

Keystone Laboratories, Inc.

Sue Thompson
Project Manager I

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Keystone

LABORATORIES, INC.



MEMBER
ACCL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D0165

April 13, 2011
Page 9 of 9

CHAIN OF CUSTODY RECORD								
Keystone LABORATORIES, INC.			600 East 17th Street South Newton, IA 50208 641-792-8451			Page 1 of 1 Printed: 4/5/2011 1:03:00PM www.keystonelabs.com		
SITE INFORMATION Sampler: <i>Pryke</i> Project: Quarterly Waste Pretreatment Pretreatment			REPORT TO Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010			INVOICE TO Accounts Payable Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010		
SPECIAL INSTRUCTIONS None Turn Around Time <input type="checkbox"/> Standard <input checked="" type="checkbox"/> RUSH, need by <u>11</u>			LAB USE ONLY Work Order <u>11D0165</u> Temperature Turn-Cooler: No			<input type="checkbox"/> Custody Seal <input type="checkbox"/> Containers Intact <input type="checkbox"/> COCALabels Agree <input type="checkbox"/> Preservation Confirmed <input type="checkbox"/> Received on Ice		
Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
01-001	Front Parking Lot North Manhole	Water		4/5/11	10 ²⁰		temperature me-i-208.7 cbod-3210 cod-t-410.4 ka-351.2 flow-total og-profile-1664 nb3-4500be cn-4-4500c pk-field-4500 ts-i-3765-85	Q1
<i>Jan D. Pyke 4/5/11 12:55</i> Relinquished By _____ Date/Time _____			<i>M. Main 4/5/11 12:55</i> Relinquished By _____ Date/Time _____			Remarks: _____		
Received By _____ Date/Time _____			Received for Lab By _____ Date/Time _____			Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR 46 for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Keystone Analytical Report

4/26/11



ANALYTICAL REPORT

May 03, 2011

Page 1 of 4

Work Order: 11D1268

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information
Date Received: 04/26/2011 10:40AM
Collector: Pryke
Phone: (515) 239-6539
PO Number: 4501784596

Project : Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11D1268-01	Front Parking Lot North Manhole			Matrix: Water		Collected:	04/26/11 08:59
CBOD (5 day)	419 mg/l	4	ID12701	SM 5210 B	JRP	04/27/11 7:11	
Chemical Oxygen Demand	471 mg/l	100	ID12645	EPA 410.4	SAI	04/27/11 14:59	P-02
Flow	27000 Gallons	1.0000	ID12646	Flow	JRP	04/26/11 9:00	
pH	8.0 pH	0.5	ID12646	SM 4500 II+ B	JRP	04/26/11 9:00	
Temperature	12.2 °C	0.00	ID12646	SM 2550 B	JRP	04/26/11 9:00	

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

May 03, 2011
Page 2 of 4

Work Order: 11D1268

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D12645 - Wet Chem Preparation

Blank (1D12645-BLK1)					Prepared & Analyzed: 04/27/11					
Chemical Oxygen Demand	ND	10	mg/l							
LCS (1D12645-BS1)					Prepared & Analyzed: 04/27/11					
Chemical Oxygen Demand	74.3	10	mg/l	77.3250		96.1	79-110			
Matrix Spike (1D12645-MS1)				Source: 11D1223-07RE1	Prepared & Analyzed: 04/27/11					
Chemical Oxygen Demand	1320	200	mg/l	773.250	641	87.7	60-140			
Matrix Spike Dup (1D12645-MSDI)				Source: 11D1223-07RE1	Prepared & Analyzed: 04/27/11					
Chemical Oxygen Demand	1320	200	mg/l	773.250	641	88.5	60-140	0.468	26	

Batch 1D12701 - General Prep Micro

Blank (1D12701-BLK1)					Prepared & Analyzed: 04/27/01					
CBOD (5 day)	ND	4	mg/l							
Duplicate (1D12701-DUPI)				Source: 11D1311-01	Prepared & Analyzed: 04/27/01					
CBOD (5 day)	61.0	4	mg/l		79.0			25.7	30	
Duplicate (1D12701-DUP2)				Source: 11D1316-01	Prepared & Analyzed: 04/27/01					
CBOD (5 day)	504	4	mg/l		660			26.8	30	
Reference (1D12701-SRM1)					Prepared & Analyzed: 04/27/01					
CBOD (5 day)	420	4	mg/l	397.980	106	84.6-115.4				

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
EPA 410.4 in Water		
	Chemical Oxygen Demand	KS-NT,NELAC,SIA1X
SM 2550 B in Water		
	Temperature	SIA1X
SM 5210 B in Water		
	CBOD (5 day)	SIA1X

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.



MEMBER
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

May 03, 2011
Page 3 of 4

Work Order: 11D1268

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2011
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2011
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2011
SIA1X	Iowa Department of Natural Resources	95	02/01/2012

Notes and Definitions

P-02 Sample was incorrectly preserved for this analysis.

End of Report

Keystone Laboratories, Inc.

Sue Thompson
Project Manager I

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Keystone

LABORATORIES, INC.

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11D1268



MEMBER
ACIL

May 03, 2011
Page 4 of 4

CHAIN OF CUSTODY RECORD

Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

Page 1 of 1
Printed: 4/26/2011 10:44:42AM
www.keystonelabs.com

SITE INFORMATION		REPORT TO		INVOICE TO				
Sampler: <i>Pryke</i>		Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010		Accounts Payable Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010				
Project: Quarterly Waste Pretreatment Pretreatment								
SPECIAL INSTRUCTIONS		LAB USE ONLY						
None		Work Order <i>11D1268</i>		<input type="checkbox"/> Custody Seal <input type="checkbox"/> Containers Intact <input type="checkbox"/> COC Labels Agree <input type="checkbox"/> Preservation Confirmed <input type="checkbox"/> Received on Ice				
Turn Around Time <input type="checkbox"/> Standard <input type="checkbox"/> RUSH, need by <i>1/1</i>		Temperature						
		Turn-Cooler: No						
Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
01-001	Front Parking Lot North Manhole	Water		<i>4/26/11</i>	<i>8:59</i>		temperature met-4-200.7 chd-5210 oda-4404 da-3112 flow-total	<i>10:44 4/26/11 8:59</i>

John R. Pryke 4/26/11 10:40
Relinquished By Date/Time

John M. Martin 4/26/11 10:40
Received for Lab By Date/Time

Original - Return with Report • Yellow - Lab Copy • Pink - Sampler Copy

Remarks:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. NRTL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Test America Analytical Report

5/23/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-34517-1
TestAmerica Sample Delivery Group: 500-34517-1
Client Project/Site: 11-233

For:
Fehr-Graham & Associates
1920 Daimler Road
Rockford, Illinois 61112

Attn: Ms. Erin Jarrett

Donna L. Ingersoll

Authorized for release by:
06/01/2011 03:31:26 PM

Donna Ingersoll
Project Manager II
donna.ingersoll@testamericainc.com

LINKS

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Expert

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www.testamericainc.com

Results relate only to the items tested and the sample(s) as received by the laboratory. The test results in this report meet all 2003 NELAC requirements for accredited parameters, exceptions are noted in this report. Pursuant to NELAC, this report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Case Narrative

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Job ID: 500-34517-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-34517-1

Comments

No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

Detection Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Client Sample ID: 29160-2nd qtr

Lab Sample ID: 500-34517-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0032		0.0010	0.00024	mg/L	1	8260B		Total/NA
1,1-Dichloroethene	0.0066		0.0010	0.00029	mg/L	1	8260B		Total/NA
1,1,1-Trichloroethane	0.022		0.0010	0.00026	mg/L	1	8260B		Total/NA
Trichloroethene	0.011		0.00050	0.00018	mg/L	1	8260B		Total/NA
cis-1,2-Dichloroethene	0.020		0.0010	0.00022	mg/L	1	8260B		Total/NA
Tetrachloroethene - DL	0.29		0.0050	0.0011	mg/L	5	8260B		Total/NA

Method Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

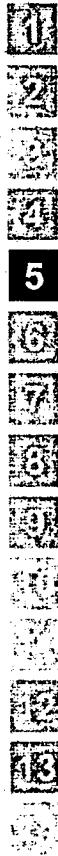
Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200



Sample Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-34517-1	29160-2nd qtr	Water	05/23/11 14:05	05/24/11 10:15

Client Sample Results

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Client Sample ID: 29160-2nd qtr

Lab Sample ID: 500-34517-1

Date Collected: 05/23/11 14:05

Matrix: Water

Date Received: 05/24/11 10:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0019	mg/L			06/01/11 10:53	1
1,1-Dichloroethane	0.0032		0.0010	0.00024	mg/L			06/01/11 10:53	1
1,1-Dichloroethene	0.0066		0.0010	0.00029	mg/L			06/01/11 10:53	1
1,1,1-Trichloroethane	0.022		0.0010	0.00026	mg/L			06/01/11 10:53	1
Trichloroethene	0.011		0.00050	0.00018	mg/L			06/01/11 10:53	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			06/01/11 10:53	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00027	mg/L			06/01/11 10:53	1
cis-1,2-Dichloroethene	0.020		0.0010	0.00022	mg/L			06/01/11 10:53	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	98		77 - 112					06/01/11 10:53	1
Dibromofluoromethane	95		78 - 119					06/01/11 10:53	1
1,2-Dichloroethane-d4 (Sur)	111		77 - 124					06/01/11 10:53	1
Toluene-d8 (Sur)	101		80 - 121					06/01/11 10:53	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.29		0.0050	0.0011	mg/L			06/01/11 11:17	5
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	92		77 - 112					06/01/11 11:17	5
Dibromofluoromethane	94		78 - 119					06/01/11 11:17	5
1,2-Dichloroethane-d4 (Sur)	106		77 - 124					06/01/11 11:17	5
Toluene-d8 (Sur)	96		80 - 121					06/01/11 11:17	5

TestAmerica Chicago

Definitions/Glossary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
D	Listed under the "D" column to designate that the result is reported on a dry weight basis.
EPA	United States Environmental Protection Agency
ND	Not Detected above the reporting level.
MDL	Method Detection Limit
RL	Reporting Limit
RE, RE1 (etc.)	Indicates a Re-extraction or Reanalysis of the sample.
%R	Percent Recovery
RPD	Relative Percent Difference, a measure of the relative difference between two points.

QC Association Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

GC/MS VOA

Analysis Batch: 115074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-115074/5	LCS 500-115074/5	Total/NA	Water	8260B	
MB 500-115074/7	MB 500-115074/7	Total/NA	Water	8260B	
LCSD 500-115074/18	LCSD 500-115074/18	Total/NA	Water	8260B	
500-34517-1	29160-2nd qtr	Total/NA	Water	8260B	
500-34517-1 - DL	29160-2nd qtr	Total/NA	Water	8260B	

Surrogate Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (77-112)	DBFM (78-119)	12DCE (77-124)	TOL (80-121)
500-34517-1	29160-2nd qtr	98	95	111	101
500-34517-1 - DL	29160-2nd qtr	92	94	106	96
LCS 500-115074/5	LCS 500-115074/5	91	96	103	98
LCSD 500-115074/18	LCSD 500-115074/18	91	95	101	100
MB 500-115074/7	MB 500-115074/7	89	96	108	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-115074/7

Matrix: Water

Analysis Batch: 115074

Client Sample ID: MB 500-115074/7

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0019	mg/L			06/01/11 02:27	1
1,1-Dichloroethane	<0.0010		0.0010	0.00024	mg/L			06/01/11 02:27	1
1,1-Dichloroethene	<0.0010		0.0010	0.00029	mg/L			06/01/11 02:27	1
m&p-Xylene	<0.0010		0.0010	0.00030	mg/L			06/01/11 02:27	1
o-Xylene	<0.00050		0.00050	0.00013	mg/L			06/01/11 02:27	1
Tetrachloroethene	<0.0010		0.0010	0.00022	mg/L			06/01/11 02:27	1
1,1,1-Trichloroethane	<0.0010		0.0010	0.00026	mg/L			06/01/11 02:27	1
Trichloroethene	<0.00050		0.00050	0.00018	mg/L			06/01/11 02:27	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			06/01/11 02:27	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00027	mg/L			06/01/11 02:27	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00022	mg/L			06/01/11 02:27	1
Surrogate	MB % Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surf)	89		77 - 112					06/01/11 02:27	1
Dibromofluoromethane	96		78 - 119					06/01/11 02:27	1
1,2-Dichloroethane-d4 (Sum)	108		77 - 124					06/01/11 02:27	1
Toluene-d8 (Surf)	98		80 - 121					06/01/11 02:27	1

Lab Sample ID: LCS 500-115074/5

Matrix: Water

Analysis Batch: 115074

Client Sample ID: LCS 500-115074/5

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec	% Rec.
Acetone	0.0500	0.0477		mg/L		95	43 - 153
1,1-Dichloroethane	0.0500	0.0448		mg/L		90	64 - 117
1,1-Dichloroethene	0.0500	0.0401		mg/L		80	60 - 126
m&p-Xylene	0.100	0.0821		mg/L		82	77 - 117
o-Xylene	0.0500	0.0413		mg/L		83	74 - 117
Tetrachloroethene	0.0500	0.0470		mg/L		94	76 - 114
1,1,1-Trichloroethane	0.0500	0.0426		mg/L		85	66 - 128
Trichloroethene	0.0500	0.0465		mg/L		93	75 - 116
Xylenes, Total	0.150	0.123		mg/L		82	74 - 117
trans-1,2-Dichloroethene	0.0500	0.0442		mg/L		88	67 - 120
cis-1,2-Dichloroethene	0.0500	0.0422		mg/L		84	66 - 111
Surrogate	% Recovery	Qualifer	Limits				Limits
4-Bromofluorobenzene (Surf)	91		77 - 112				
Dibromofluoromethane	96		78 - 119				
1,2-Dichloroethane-d4 (Sum)	103		77 - 124				
Toluene-d8 (Surf)	98		80 - 121				

Lab Sample ID: LCSD 500-115074/18

Matrix: Water

Analysis Batch: 115074

Client Sample ID: LCSD 500-115074/18

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec	% Rec.	RPD	
Acetone	0.0500	0.0443		mg/L		89	43 - 153	7	20
1,1-Dichloroethane	0.0500	0.0442		mg/L		88	64 - 117	1	20
1,1-Dichloroethene	0.0500	0.0407		mg/L		81	60 - 126	1	20

TestAmerica Chicago

06/01/2011

QC Sample Results

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 500-115074/18

Matrix: Water

Analysis Batch: 115074

Client Sample ID: LCSD 500-115074/18

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec.	Limits	RPD	Limit
m&p-Xylene	0.100	0.0846		mg/L	85	77 - 117	3	20	
o-Xylene	0.0500	0.0426		mg/L	85	74 - 117	3	20	
Tetrachloroethene	0.0500	0.0487		mg/L	97	76 - 114	4	20	
1,1,1-Trichloroethane	0.0500	0.0427		mg/L	85	66 - 128	0	20	
Trichloroethene	0.0500	0.0464		mg/L	93	75 - 116	0	20	
Xylenes, Total	0.150	0.127		mg/L	85	74 - 117	3	20	
trans-1,2-Dichloroethene	0.0500	0.0467		mg/L	93	67 - 120	6	20	
cis-1,2-Dichloroethene	0.0500	0.0420		mg/L	84	66 - 111	0	20	
Surrogate	LCSD % Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Sur)	91		77 - 112						
Dibromofluoromethane	95		78 - 119						
1,2-Dichloroethane-d4 (Sur)	101		77 - 124						
Toluene-d8 (Sur)	100		80 - 121						

TestAmerica Chicago

06/01/2011

Certification Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-34517-1
SDG: 500-34517-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago		USDA		P330-09-00027
TestAmerica Chicago	ACCLASS	DoD ELAP	0	ADE-1429
TestAmerica Chicago	ACCLASS	ISO/IEC 17025	0	AT-1428
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	Georgia EPD	4	N/A
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	Kentucky UST	4	66
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina	North Carolina DENR	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

TestAmerica Chicago

Page 13 of 15

06/01/2011

Chain of Custody Record

Central IL- 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
 Chicago Office - PO Box 2116 - Crystal Lake, IL 60039-2116 - Phone (847) 651-2804 - Facsimile (847) 458-9680



Client Ref.	Fehr-Graham & Associates					Chain of Custody Record													
Address	221 E. Main St.																		
City/State/Zip Code	Freeport, IL 61032																		
Phone/Fax/Email No.	815-235-7643 / 815-235-4632																		
Credit Protection	11-233																		
Location																			
Sampler(s) / Phone(s)	Amy Schneiderman / 815-235-7643																		
Delivery Timeframe	Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Date Required:																		
Comments																			
Contact Person	Amy Schneiderman																		
Sample Description	Sampling	Method	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample	Sample
29160-2nd Quarter	5-23-11	2:05pm	A	4		X													
Sample Code	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air	W-Air
Reinforced By		Date	Time																
Amy Schneiderman	5-23-11	2:10pm	2:10pm																
Special Instructions:						Q/C Level		Q/C Level		Q/C Level		Q/C Level		Q/C Level		Q/C Level		Q/C Level	
						1		2		3		4							

Page ____ of ____

Copies: White - Client Yellow - PAS, Inc. Pink - Sampler

Login Sample Receipt Checklist

Client: Fehr-Graham & Associates

Job Number: 500-34517-1
SDG Number: 500-34517-1

Login Number: 34517

List Source: TestAmerica Chicago

List Number: 1

Creator: James, Jeff A

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	



Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
 Chicago Office - PO Box 2116 - Crystal Lake, IL 60039-2116 - Phone (847) 651-2604 - Facsimile (847) 458-9680

www.prairieanalytical.com



Client Name:		Fehr-Graham & Associates												Analysis and/or method Requested		Reporting			
Address:		221 E. Main St.												VOCs Method 8260		PACO			
City, State, Zip, Code:		Freeport, IL 61032														Resid			
Phone / Facsimile No.:		815-235-7643			/ 815-235-4632									Ind/Comm					
Client Project #:		11-233																CALMP	
Location:																		A B	
Sampler(s)/Phone:		Amy Schneiderman			/ 815-235-7643									C					
Turnaround Time:		Standard [X] Rush [] Date Required:														RISO			
Off or Invoice To:																Resid			
Contact Person:		Amy Schneiderman														Indust			
Sample Description:		Sampling		Matrix	Total # of	Sample								Comments					
		Date:	Volume	Code	Containers	Comp	Grab												
29160-2nd Quarter		5-23-11	2:05pm	A	4		X	X											
M=Matrix Code		A=Aqueous		DW=Drinking Water	GW=Groundwater	NA=Non-aqueous Liquids		S=Solids	S=NO Other (Specify)										
Relinquished By:		Date:	Time:	Received By:		Date:	Time:	Method of Shipment:											
Amy Schneiderman		5-23-11	2:10pm																
Special Instructions:										Q/C Level	On Wet Ice	C/N	Temperature (°C)						
										1_ 2_ 3_ 4_	Proper Preservatn								



FEHR-GRAHAM & ASSOCIATES
Engineering & Science Consultants

SOLUTIONS SINCE 1973

FILE COPY

CERTIFIED MAIL NUMBER: 7010 1670 0002 5134 9107
RETURN RECEIPT REQUESTED

October 5, 2011

City of Ames, Iowa
Water and Pollution Control Department
300 East Fifth Street, Building 1
Ames, IA 50010

RE: Non-Domestic Waste Pretreatment Program Quarterly Report – 3rd Quarter 2011
Sauer-Danfoss (US) Company
2800 East 13th Street
Ames, IA 50010
Facility Permit No. 6593-7

Dear Sir/Madam:

Enclosed, please find the Non-Domestic Waste Pretreatment Program Quarterly Report for wastewater discharge from the above-referenced facility for the 3rd quarter of 2011. Also enclosed are copies of the analytical reports from Keystone Labs and Test America for the analysis of wastewater and groundwater remediation respectively and a summary of monthly flow in gals/month from the groundwater remediation project.

Should you have any questions regarding these documents, please do not hesitate to contact this office.

Sincerely,

Amy Schneiderman

Amy L. Schneiderman
Environmental Specialist

ALS:mll

K:\Sec\SEC 2011\11-313 - Sauer-Danfoss Ames\ALS 11-313 - 3rd Qtrr Wastewater to City of Ames.doc
Enclosure

cc: Sauer-Danfoss (with enclosure)

221 E Main St Suite 200
Freeport IL 61032
ph 815 235 7643
fax 815 235 4632
www.fehr-graham.com

Non-Domestic Waste Pretreatment Program

Quarterly Report

(Non-Significant, Non-Domestic Contributor)

3rd Quarter 2011

Reporting Period: 7/1/2011 to 9/30/2011

Submit results on or before the 10th of the month following the end of the quarter

Facility: Sauer-Danfoss

Permit No: 6593-7

Facility Contact: Gary Erickson

Facility Phone No: 515-239-6000

Sampling Location: Front Parking Lot North Manhole (Wastewater)/On-Site Wastewater Treatment

Sample Port (GW Remediation)

Sample Type: Grab & 24 Hour Composite

Sample Date: 8/30/11 (GW Remediation) / 7/6/11 (Wastewater)

Analyte	Permit Limit Mg/L	Sample Results Mg/L
Facility	Sauer Danfoss 2800 East 13th	Sauer Danfoss 2800 East 13th
Flow	Gals/Day	36,000
pH	6-10 pH	6.50
TSS	1,500	432
Cyanide	0.55	< 0.007
Ammonia (NH3)	200	15.4
Total Kjeldahl Nitrogen (TKN)	250	39.2
Oil & Grease	300	19
CBOD 5	1,500	328
COD	2,500	560
Molybdenum	0.19	0.018
GW remediation	Max Expected Concentration ug/L	ug/L
Flow (remediation)	Gals/Quart	462,233
Acetone	44	< 5
1,1-Dichloroethane	370	5.1
1,1-Dichloroethene	170	9.2
cis- 1,2-Dichloroethene	490	40
Tetrachloroethene	1700	380
1,1,1-Trichloroethane	650	35
Trichloroethene	110	14
Total Xylenes	11	< 1

Note: Please attach sample results from Laboratory

Process or Treatment Change: None

Additional Comments: Please see attached for Groundwater Remediation Flow Data.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed _____
Authorized Representative

Date _____

Sauer-Danfoss
Ames, IA
Groundwater Remediation Flow Data

July 2011	243,999
August 2011	132,643
September 2011	85,590
Total flow (gals) 3rd Quarter:	462,233
	5,024 gpd

of days in Quarter = 92

Keystone Analytical Report

7/6/11



ANALYTICAL REPORT

July 20, 2011

Page 1 of 16

Work Order: 11G0171

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information
Date Received: 07/06/2011 12:30PM Collector: Pryke/Swank Phone: (515) 239-6539 PO Number: 4501784596

Project : Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11G0171-01	Front Parking Lot North Manhole			Matrix: Water		Collected:	07/06/11 08:40
CBOD (5 day)	328 mg/l	4	IG10701	SM 5210 B	LJG	07/07/11	7:04
Cyanide, total	<0.007 mg/l	0.007	IG11205	4500CN-E	DRB	07/12/11	8:14
Chemical Oxygen Demand	560 mg/l	100	IG10639	EPA 410.4	SAI	07/07/11	13:09
Nitrogen, Ammonia	15.4 mg/l	1.0	IG10732	SM 4500-NH3 B,E	JDK	07/08/11	13:37
Oil/Grease, animal/vegetable	17 mg/l	4	IG11105	EPA 1664	DRB	07/11/11	8:44
Oil/Grease, petroleum	<4 mg/l	4	IG11105	EPA 1664	DRB	07/11/11	8:44
Oil and Grease	19 mg/l	4	IG11105	EPA 1664	DRB	07/11/11	8:44
Nitrogen, Kjeldahl, total	39.2 mg/l	10.0	IG11237	SM 4500-N ORG	DRB	07/19/11	15:21
Solids, total suspended	432 mg/l	20	IG11111	USGS I-3765-85	SAI	07/11/11	9:35
Molybdenum, total	0.018 mg/l	0.010	IG10704	EPA 200.7	SAA	07/07/11	18:01
Flow	36000 Gallons	1.0000	IG10646	Flow	JRP	07/06/11	8:40
pH	6.5 pH	0.5	IG10646	SM 4500 H+ B	JRP	07/06/11	8:40
Temperature	21.5 °C	0.00	IG10646	SM 2550 B	JRP	07/06/11	8:40

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
Page 2 of 16

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch 1G10639 - Wet Chem Preparation										
Blank (1G10639-BLK1)										
Chemical Oxygen Demand	ND	10	mg/l							
LCS (1G10639-BS1)										
Chemical Oxygen Demand	68.7	10	mg/l	78.5000		87.5	79-110			
Matrix Spike (1G10639-MS1)										
Chemical Oxygen Demand	205	20	mg/l	78.5000	136	88.3	60-140			
Matrix Spike Dup (1G10639-MSD1)										
Chemical Oxygen Demand	209	20	mg/l	78.5000	136	93.0	60-140	1.80	26	
Batch 1G10701 - General Prep Micro										
Blank (1G10701-BLK1)										
CBOD (5 day)	ND	4	mg/l							
Duplicate (1G10701-DUP1)										
CBOD (5 day)	44.0	4	mg/l	48.0				8.70	30	
Duplicate (1G10701-DUP2)										
CBOD (5 day)	1960	4	mg/l	1960				0.153	30	
Reference (1G10701-SRM1)										
CBOD (5 day)	382	4	mg/l	393.360		97.1	84.6-115.4			
Batch 1G10732 - Wet Chem Preparation										
Blank (1G10732-BLK1)										
Nitrogen, Ammonia	ND	1.0	mg/l							

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

July 20, 2011
Page 3 of 16

Work Order: 11G0171

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------------	-------

Batch 1G10732 - Wet Chem Preparation

LCS (1G10732-BS1)						Prepared: 07/07/11 Analyzed: 07/08/11			
Nitrogen, Ammonia	9.5	1.0	mg/l	10.0000		94.7	87-110		
Matrix Spike (1G10732-MS1)						Source: 11G0197-01 Prepared: 07/07/11 Analyzed: 07/08/11			
Nitrogen, Ammonia	12.0	1.0	mg/l	10.0000	2.6	94.7	85-110		
Matrix Spike Dup (1G10732-MSD1)						Source: 11G0197-01 Prepared: 07/07/11 Analyzed: 07/08/11			
Nitrogen, Ammonia	12.4	1.0	mg/l	10.0000	2.6	98.9	85-110	3.43	10
Reference (1G10732-SRM1)						Prepared: 07/07/11 Analyzed: 07/08/11			
Nitrogen, Ammonia	9.3	1.0	mg/l	10.0000		93.3	75-125		

Batch 1G11105 - Wet Chem Preparation

Blank (1G11105-BLK1)						Prepared & Analyzed: 07/10/01			
Oil and Grease	ND	4	mg/l						
Oil/Grease, animal/vegetable	ND	4	"						
Oil/Grease, petroleum	ND	4	"						
LCS (1G11105-BS1)						Prepared & Analyzed: 07/10/01			
Oil and Grease	35	4	mg/l	40.0000		86.8	78-114		
Oil/Grease, animal/vegetable	19	4	"	20.0000		96.0	64-132		
Oil/Grease, petroleum	16	4	"	20.0000		77.5	64-132		
Matrix Spike (1G11105-MS1)						Source: 11G0367-01 Prepared & Analyzed: 07/10/01			
Oil and Grease	38	4	mg/l	40.1606	0.9	91.8	78-114		
Oil/Grease, animal/vegetable	21	4	"	20.0803	ND	103	64-132		
Oil/Grease, petroleum	17	4	"	20.0803	ND	85.0	64-132		

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
Page 4 of 16

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G11105 - Wet Chem Preparation										
Matrix Spike Dup (1G11105-MSD1)										
Source: 11G0367-01 Prepared & Analyzed: 07/10/01										
Oil and Grease	37	4	mg/l	40.1204	0.9	89.2	78-114	2.80	18	
Oil/Grease, animal/vegetable	20	4		20.0602	ND	98.0	64-132	5.08	34	
Oil/Grease, petroleum	17	4		20.0602	ND	85.0	64-132	0.100	34	
Batch 1G11111 - Wet Chem Preparation										
Blank (1G11111-BLK1)										
Source: 11G0367-01 Prepared & Analyzed: 07/11/01										
Solids, total suspended	ND	1	mg/l							
LCS (1G11111-BS1)										
Source: 11G0155-01 Prepared & Analyzed: 07/11/01										
Solids, total suspended	12.7	1	mg/l	15.0000		84.7	67-111			
Duplicate (1G11111-DUP1)										
Source: 11G0155-01 Prepared & Analyzed: 07/11/01										
Solids, total suspended	99.5	5	mg/l		97.5			2.03	30	
Batch 1G11205 - Wet Chem Preparation										
Blank (1G11205-BLK1)										
Source: 11G0367-01 Prepared & Analyzed: 07/12/01										
Cyanide, total	ND	0.007	mg/l							
LCS (1G11205-BS1)										
Source: 11G0367-01 Prepared & Analyzed: 07/12/01										
Cyanide, total	0.019	0.007	mg/l	0.0199974		93.8	86-123			
Matrix Spike (1G11205-MS1)										
Source: 11G0367-01 Prepared & Analyzed: 07/12/01										
Cyanide, total	0.022	0.007	mg/l	0.0199974	0.002	97.4	76-129			

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

July 20, 2011
Page 5 of 16

Work Order: 11G0171

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Reporting Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	---------------------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 1G11205 - Wet Chem Preparation

Matrix Spike Dup (1G11205-MSD1)	Source: 11G0367-01			Prepared & Analyzed: 07/12/01					
Cyanide, total	0.021	0.007	mg/l	0.0199974	0.002	95.7	76-129	1.59	11

Batch 1G11237 - Wet Chem Preparation

Blank (1G11237-BLK1)	Prepared & Analyzed: 07/19/11								
Nitrogen, Kjeldahl, total	ND	10.0	mg/l						
LCS (1G11237-BS1)	Prepared & Analyzed: 07/19/11								
Nitrogen, Kjeldahl, total	105	10.0	mg/l	120.000	87.9	80-110			
Matrix Spike (1G11237-MS1)	Prepared & Analyzed: 07/19/11								
Nitrogen, Kjeldahl, total	133	10.0	mg/l	120.000	31.9	84.3	76-110		
Matrix Spike Dup (1G11237-MSD1)	Prepared & Analyzed: 07/19/11								
Nitrogen, Kjeldahl, total	129	10.0	mg/l	120.000	31.9	81.2	76-110	2.80	10

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
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Determination of Total Metals - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1G10704 - EPA 3010A Total ICP										
Blank (1G10704-BLK1)										
Molybdenum, total	ND	0.010	mg/l							
LCS (1G10704-BS1)										
Molybdenum, total	0.223	0.010	mg/l	0.200000		111	85-115			
Matrix Spike (1G10704-MS1)										
Molybdenum, total	0.213	0.010	mg/l	0.200000	0.00330	105	70-130			
Matrix Spike Dup (1G10704-MSD1)										
Molybdenum, total	0.219	0.010	mg/l	0.200000	0.00330	108	70-130	2.87	20	
Post Spike (1G10704-PS1)										
Molybdenum, total	0.213		mg/l	0.200000	0.00327	105	85-115			

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

July 20, 2011
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Work Order: 11G0171

Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
4500CN-E In Water	Cyanide, total	KS-NT,NELAC,SIA1X
EPA 1664 In Water	Oil and Grease	KS-NT,NELAC,SIA1X
	Oil/Grease, animal/vegetable	KS-NT,NELAC,SIA1X
	Oil/Grease, petroleum	KS-NT,NELAC,SIA1X
EPA 200.7 In Water	Molybdenum, total	NELAC,SIA1X,KS-NT
EPA 410.4 in Water	Chemical Oxygen Demand	KS-NT,NELAC,SIA1X
SM 2550 B in Water	Temperature	SIA1X
SM 4500-N ORG in Water	Nitrogen, Kjeldahl, total	KS-NT,NELAC,SIA1X
SM 4500-NH3 B,E in Water	Nitrogen, Ammonia	KS-NT,NELAC
SM 5210 B in Water	CBOD (5 day)	SIA1X
USGS I-3765-85 in Water	Solids, total suspended	SIA1X,NELAC,KS-NT

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2012
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2011
MO-KC	Missouri Department of Natural Resources	140	04/30/2012
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2011
SIA1X	Iowa Department of Natural Resources	95	02/01/2012

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
Page 8 of 16

End of Report

A handwritten signature in cursive script that reads "Staci Arnold".

Keystone Laboratories, Inc.

Staci Arnold For Sue Thompson
Project Manager II

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989



LABORATORIES, INC.



M E M B E R
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
Page 9 of 16

Page 1 of 1
Printed: 7/5/2011 1:56:08PM
www.keystonelabs.com

CHAIN OF CUSTODY RECORD

N 3-08037
Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

SITE INFORMATION

Sampler: *Pryke/Sauerk*
Project: Quarterly Waste Pretreatment
Pretreatment

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by 11

REPORT TO

Gary Erickson
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

LAB USE ONLY

Work Order 11G0171

Temperature

Turn-Cooler: No

INVOICE TO

Accounts Payable
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

- Custody Seal
- Containers Intact
- COC/Labels Agree
- Preservation Confirmed
- Received on Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
01-001	Front Parking Lot North Manhole	Water		7/6/11	8:40	—	temp no-l-200.7 cbod-3210 cod-410.4 tn-351.2 flow-total og-profil-1664 nh3-4500e ca-4500e ph-field-4500 ts-1-3763-83	01

for R. Poyer 7/6/11 12:00
Relinquished By Date/Time

M. Marci 7/6/11 12:30
Relinquished By Date/Time

Remarks:

Received By Date/Time

Original - Return with Report Yellow - Lab Copy Pink - Sampler Copy

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Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Keystone

LABORATORIES, INC.



MEMBER
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
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2600

11G0171

SAMPLER ID# 1182518539 08:46 6-JUL-11
Hardware: A1 Software: 2.31
***** PROGRAM SETTINGS *****

SITE DESCRIPTION:
"SAUR-DANFO"

UNITS SELECTED:
FLOW RATE: gpm
FLOW VOLUME: gal

BUBBLER MODULE:
FLOW-INSERT
8"
V-NOTCH

1, 9.80 lit BTLS
25 ft SUCTION LINE

PACING:
FLOW, EVERY
300.0 gal

COMPOSITE:

120 SAMPLES

70 ml SAMPLES

NO DELAY TO START

24 HOURS RUN TIME

SAMPLER ID# 1182518539 08:46 6-JUL-11
Hardware: A1 Software: 2.31
***** SAMPLING RESULTS *****
SITE: SAUR-DANFO
Program Started at 08:43 TU 5-JUL-11
Nominal Sample volume = 70 ml

SAMPLE	BOTTLE	TIME	SOURCE	ERROR	COUNT	TO	LIQUID
1	1	09:00	F		752		
2	1	09:18	F		756		
3	1	09:36	F		765		
4	1	09:50	F		766		

Page 1

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

July 20, 2011
Page 11 of 16

Work Order: 11G0171

				2600
5	1	10:04	F	860
6	1	10:18	F	798
7	1	10:32	F	821
8	1	10:46	F NL	*
9	1	11:01	F NL	*
10	1	11:16	F NM	*
11	1	11:22	F NL	*
12	1	11:27	F NL	*
13	1	11:31	F NL	*
14	1	11:36	F NL	*
15	1	11:40	F NL	*
16	1	11:44	F	905
17	1	11:49	F	854
18	1	11:54	F	802
19	1	11:59	F NL	*
20	1	12:04	F NL	*
21	1	12:08	F NL	*
22	1	12:13	F	810
23	1	12:18	F NL	*
24	1	12:22	F	821
25	1	12:28	F NM	*
26	1	12:36	F NM	*
27	1	12:46	F	1883
28	1	12:57	F NL	*
29	1	13:08	F NL	*
30	1	13:19	F NL	*
31	1	13:32	F NL	*
32	1	13:44	F NM	*
33	1	13:55	F NL	*
34	1	14:04	F NL	*
35	1	14:15	F NL	*
36	1	14:27	F NL	*
37	1	14:40	F NL	*
38	1	14:53	F NL	*
39	1	15:07	F NL	*
40	1	15:22	F NL	*
41	1	15:35	F NL	*
42	1	15:49	F NL	*
43	1	16:03	F NL	*
44	1	16:17	F NL	*
45	1	16:32	F NL	*
46	1	16:49	F NL	*
47	1	17:05	F NL	*
48	1	17:22	F NL	*
49	1	17:39	F NL	*
50	1	17:52	F NL	*
51	1	17:57	F NL	*
52	1	18:03	F NL	*
53	1	18:08	F NL	*
54	1	18:13	F NL	*
55	1	18:18	F NL	*
56	1	18:23	F NL	*
57	1	18:29	F NL	*
58	1	18:34	F NL	*
59	1	18:39	F NL	*
60	1	18:45	F NL	*
61	1	18:50	F NL	*
62	1	18:56	F NL	*
63	1	19:02	F NL	*
64	1	19:12	F NL	*
65	1	19:26	F NL	*
66	1	19:42	F NL	*
67	1	19:57	F NM	*

Page 2

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ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11G0171

July 20, 2011
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				2600
68	1	20:12	F NL	*
69	1	20:30	F NL	*
70	1	20:47	F NL	*
71	1	21:04	F NL	*
72	1	21:22	F NL	*
73	1	21:40	F NL	*
74	1	21:57	F	1590
75	1	22:19	F NL	1550
76	1	22:39	F NL	*
77	1	23:00	F NL	*
78	1	23:25	F NL	*
79	1	23:48	F	1688
WE 06-JUL-11				
80	1	00:11	F NL	*
81	1	00:30	F NL	*
82	1	00:39	F NL	*
83	1	00:45	F NL	*
84	1	00:50	F NL	*
85	1	00:56	F NL	*
86	1	01:02	F NL	*
87	1	01:08	F NL	*
88	1	01:14	F NL	*
89	1	01:20	F NL	*
90	1	01:26	F NM	*
91	1	01:32	F NM	*
92	1	01:38	F NL	*
93	1	01:47	F NL	*
94	1	02:08	F NM	*
95	1	02:38	F	801
96	1	02:55	F NL	*
97	1	03:02	F NL	*
98	1	03:11	F NE	*
99	1	03:26	F NL	*
100	1	03:39	F NL	*
101	1	04:10	F NL	*
102	1	04:30	F NL	*
103	1	04:47	F NL	*
104	1	05:35	F NL	*
105	1	06:01	F NL	*
106	1	06:23	F NL	*
107	1	06:46	F NL	*
108	1	07:03	F NL	*
109	1	07:15	F NL	*
110	1	07:21	F NL	*
111	1	07:27	F NL	*
112	1	07:32	F NL	*
113	1	07:38	F NL	*
114	1	07:43	F NL	*
115	1	07:48	F NL	*
116	1	07:52	F NL	*
117	1	07:57	F NL	*
118	1	08:02	F NL	*
119	1	08:06	F NL	*
120	1	08:11	F NL	*
		08:12	PGM DONE 06-JUL	

SOURCE F ==> FLOW
ERROR NL ==> NO LIQUID DETECTED!
ERROR NM ==> NO MORE LIQUID!

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Newton, IA 50208

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July 20, 2011
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Work Order: 11G0171

2600

SAMPLER ID# 1182518539 08:47 6-JUL-11
Hardware: A1 Software: 2.31

BUBBLER MODULE: 1160556497

Hardware: A0 Software: 1.07

***** COMBINED RESULTS *****

SITE: SAUR-DANFO

Program Started at 08:43 TU 5-JUL-11

Nominal Sample Volume = 70 ml

SAMPLE	BOTTLE	TIME	LEVEL	FLOW	TOTAL
			ft	gpm	gal
1	1	09:00	0.397	18.29	0000000300
2	1	09:18	0.387	16.39	0000000600
3	1	09:36	0.404	19.62	0000000900
4	1	09:50	0.404	19.62	0000001200
5	1	10:04	0.413	21.75	0000001490
6	1	10:18	0.407	20.32	0000001800
7	1	10:32	0.410	21.02	0000002100
8	1	10:46	0.427	24.80	0000002400
9	1	11:01	0.423	24.01	0000002700
10	1	11:16	0.390	17.01	0000003000
11	1	11:22	0.554	60.16	0000003300
12	1	11:27	0.571	63.72	0000003600
13	1	11:31	0.571	63.72	0000003900
14	1	11:36	0.594	68.36	0000004200
15	1	11:40	0.614	72.06	0000004500
16	1	11:44	0.594	68.36	0000004800
17	1	11:49	0.564	62.32	0000005100
18	1	11:54	0.558	60.89	0000005400
19	1	11:59	0.554	60.16	0000005700
20	1	12:04	0.594	68.36	0000006000
21	1	12:08	0.564	62.32	0000006300
22	1	12:13	0.568	63.03	0000006600
23	1	12:18	0.561	61.61	0000006900
24	1	12:22	0.577	65.08	0000007200
25	1	12:28	0.479	40.37	0000007500
26	1	12:36	0.463	35.08	0000007800
27	1	12:46	0.443	28.99	0000008100
28	1	12:57	0.449	30.79	0000008400
29	1	13:08	0.430	25.61	0000008700
30	1	13:19	0.423	24.01	0000009000
31	1	13:32	0.420	23.24	0000009300
32	1	13:44	0.420	23.24	0000009600
33	1	13:55	0.436	27.26	0000009900
34	1	14:04	0.449	30.79	0000010190
35	1	14:15	0.417	22.48	0000010490
36	1	14:27	0.423	24.01	0000010790
37	1	14:40	0.436	27.26	0000011090
38	1	14:53	0.420	23.24	0000011390
39	1	15:07	0.404	19.62	0000011690
40	1	15:22	0.400	18.95	0000012000
41	1	15:35	0.400	18.95	0000012290
42	1	15:49	0.404	19.62	0000012590
43	1	16:03	0.423	24.01	0000012890
44	1	16:17	0.413	21.75	0000013190
45	1	16:32	0.394	17.64	0000013500
46	1	16:49	0.390	17.01	0000013800
47	1	17:05	0.407	20.32	0000014100
48	1	17:22	0.397	18.29	0000014400
49	1	17:39	0.407	20.32	0000014700
50	1	17:52	0.482	41.38	0000015000

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Work Order: 11G0171

July 20, 2011
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						2600
51	1	17:57	0.538	56.39	0000015300	
52	1	18:03	0.538	56.39	0000015600	
53	1	18:08	0.551	59.43	0000015900	
54	1	18:13	0.545	57.93	0000016200	
55	1	18:18	0.545	57.93	0000016500	
56	1	18:23	0.551	59.43	0000016800	
57	1	18:29	0.531	54.80	0000017100	
58	1	18:34	0.535	55.60	0000017400	
59	1	18:39	0.548	58.68	0000017700	
60	1	18:45	0.531	54.80	0000018000	
61	1	18:50	0.525	53.17	0000018300	
62	1	18:56	0.528	53.99	0000018600	
63	1	19:02	0.466	36.17	0000018900	
64	1	19:12	0.430	25.61	0000019200	
65	1	19:26	0.397	18.29	0000019500	
66	1	19:42	0.410	21.02	0000019800	
67	1	19:57	0.404	19.62	0000020100	
68	1	20:12	0.394	17.64	0000020400	
69	1	20:30	0.387	16.39	0000020700	
70	1	20:47	0.394	17.64	0000021000	
71	1	21:04	0.394	17.64	0000021300	
72	1	21:22	0.387	16.39	0000021600	
73	1	21:40	0.387	16.39	0000021900	
74	1	21:57	0.394	17.64	0000022200	
75	1	22:19	0.364	12.46	0000022500	
76	1	22:39	0.387	16.39	0000022800	
77	1	23:00	0.364	12.46	0000023100	
78	1	23:25	0.361	11.96	0000023400	
79	1	23:48	0.358	11.46	0000023700	
		WE	6-JUL-11			
80	1	00:11	0.390	17.01	0000024000	
81	1	00:30	0.384	15.79	0000024300	
82	1	00:39	0.522	52.35	0000024600	
83	1	00:45	0.518	51.50	0000024900	
84	1	00:50	0.535	55.60	0000025200	
85	1	00:56	0.515	50.65	0000025500	
86	1	01:02	0.515	50.65	0000025800	
87	1	01:08	0.515	50.65	0000026100	
88	1	01:14	0.515	50.65	0000026400	
89	1	01:20	0.512	49.78	0000026700	
90	1	01:26	0.515	50.65	0000027000	
91	1	01:32	0.509	48.90	0000027300	
92	1	01:38	0.492	44.31	0000027600	
93	1	01:47	0.413	21.75	0000027900	
94	1	02:08	0.371	13.52	0000028200	
95	1	02:38	0.358	11.46	0000028500	
96	1	02:55	0.479	40.37	0000028800	
97	1	03:02	0.482	41.38	0000029100	
98	1	03:11	0.407	20.32	0000029400	
99	1	03:26	0.423	24.01	0000029700	
100	1	03:39	0.423	24.01	0000030000	
101	1	04:10	0.318	6.518	0000030300	
102	1	04:30	0.400	18.95	0000030600	
103	1	04:47	0.322	6.864	0000030900	
104	1	05:35	0.325	7.225	0000031200	
105	1	06:01	0.364	12.46	0000031500	
106	1	06:23	0.377	14.63	0000031800	
107	1	06:46	0.374	14.07	0000032100	
108	1	07:03	0.394	17.64	0000032400	
109	1	07:15	0.531	54.80	0000032700	
110	1	07:21	0.518	51.50	0000033010	
111	1	07:27	0.518	51.50	0000033310	

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July 20, 2011
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Work Order: 11G0171

					2600
112	1	07:32	0.522	52.35	0000033600
113	1	07:38	0.541	57.16	0000033900
114	1	07:43	0.561	61.61	0000034200
115	1	07:48	0.558	60.89	0000034500
116	1	07:52	0.574	64.41	0000034800
117	1	07:57	0.564	62.32	0000035110
118	1	08:02	0.587	67.07	0000035400
119	1	08:06	0.587	67.07	0000035700
120	1	08:11	0.551	59.43	0000036000

SAMPLER ID# 1182518539 08:48 6-JUL-11
Hardware: A1 Software: 2.31
***** COMBINED RESULTS *****
SITE: SAUR-DANFO
Program Started at 08:43 TU 5-JUL-11
Nominal Sample Volume = 70 ml
FR-TEMP
SAMPLE BOTTLE TIME C
NO FR-TEMPERATURE

SAMPLER ID# 1182518539 08:48 6-JUL-11
Hardware: A1 Software: 2.31
***** COMBINED RESULTS *****
SITE: SAUR-DANFO
Program Started at 08:43 TU 5-JUL-11
Nominal Sample Volume = 70 ml
SAMPLE BOTTLE TIME
NO RAIN GAUGE

SAMPLER ID# 1182518539 08:48 6-JUL-11
Hardware: A1 Software: 2.31
SDI-12 DATA
***** COMBINED RESULTS *****
SITE: SAUR-DANFO
Program Started at 08:43 TU 5-JUL-11
Nominal Sample Volume = 70 ml

NO SDI-12 SONDE

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Keystone

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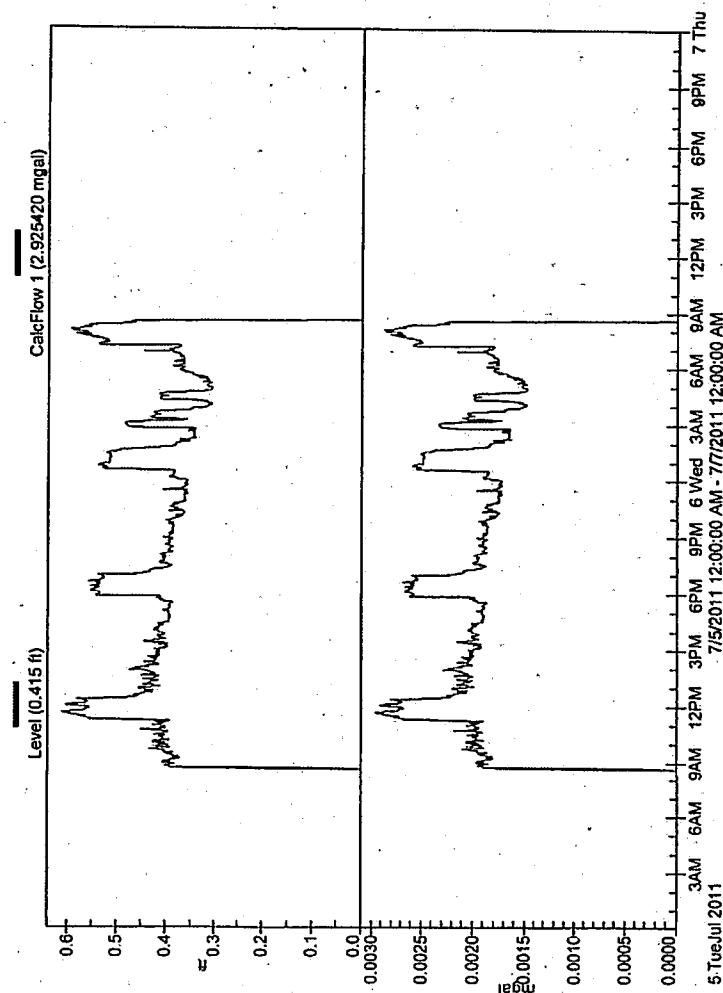
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Work Order: 11G0171

July 20, 2011
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SAUR-DANFO
FlowLink 5



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Test America Analytical Report

8/30/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

1
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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-38545-1

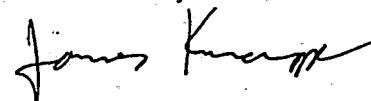
TestAmerica Sample Delivery Group: 500-38545-1

Client Project/Site: 11-233

For:

Fehr-Graham & Associates
221 E. Main Street, Suite 200
Freeport, Illinois 61032-4201

Attn: Ms. Amy Schneiderman



Authorized for release by:

09/02/2011 02:42:13 PM

Jim Knapp

Customer Service Manager
jim.knapp@testamericainc.com

Designee for

Donna Ingersoll
Project Manager II
donna.ingersoll@testamericainc.com

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Results relate only to the items tested and the sample(s) as received by the laboratory.
The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Case Narrative

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Job ID: 500-38545-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-38545-1

Comments

No additional comments.

Receipt

4 of the 6 vials have bubbles present in them, 2 are good.

All other samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

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Detection Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233'

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Client Sample ID: 29540--3RD QUARTER

Lab Sample ID: 500-38545-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0051		0.0010	0.00024	mg/L	1	8260B	Total/NA	
1,1-Dichloroethene	0.0092		0.0010	0.00029	mg/L	1	8260B	Total/NA	
1,1,1-Trichloroethane	0.035		0.0010	0.00026	mg/L	1	8260B	Total/NA	
Trichloroethene	0.014		0.00050	0.00018	mg/L	1	8260B	Total/NA	
cis-1,2-Dichloroethene	0.040		0.0010	0.00022	mg/L	1	8260B	Total/NA	
Tetrachloroethene - DL	0.38		0.0050	0.0011	mg/L	5	8260B	Total/NA	

Method Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Method	Method Description	Protocol	Laboratory
B260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-38545-1	29540-3RD QUARTER	Water	08/30/11 15:00	08/31/11 10:30

Client Sample Results

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Client Sample ID: 29540-3RD QUARTER

Lab Sample ID: 500-38545-1

Date Collected: 08/30/11 15:00
Date Received: 08/31/11 10:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0019	mg/L			09/01/11 12:40	1
1,1-Dichloroethane	0.0051		0.0010	0.00024	mg/L			09/01/11 12:40	1
1,1-Dichloroethene	0.0092		0.0010	0.00029	mg/L			09/01/11 12:40	1
1,1,1-Trichloroethane	0.035		0.0010	0.00026	mg/L			09/01/11 12:40	1
Trichloroethene	0.014		0.00050	0.00018	mg/L			09/01/11 12:40	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			09/01/11 12:40	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00027	mg/L			09/01/11 12:40	1
cis-1,2-Dichloroethene	0.040		0.0010	0.00022	mg/L			09/01/11 12:40	1
<hr/>									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	86		77 - 112					09/01/11 12:40	1
Dibromofluoromethane	92		78 - 119					09/01/11 12:40	1
1,2-Dichloroethane-d4 (Sur)	95		77 - 124					09/01/11 12:40	1
Toluene-d8 (Sur)	91		80 - 121					09/01/11 12:40	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.38		0.0050	0.0011	mg/L			09/01/11 13:06	5
<hr/>									
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	93		77 - 112					09/01/11 13:06	5
Dibromofluoromethane	103		78 - 119					09/01/11 13:06	5
1,2-Dichloroethane-d4 (Sur)	104		77 - 124					09/01/11 13:06	5
Toluene-d8 (Sur)	98		80 - 121					09/01/11 13:06	5

Definitions/Glossary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit (Dioxin)
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or method detection limit if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

GC/MS VOA

Analysis Batch: 124256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-38545-1	29540-3RD QUARTER	Total/NA	Water	8260B	
500-38545-1 - DL	29540-3RD QUARTER	Total/NA	Water	8260B	
LCS 500-124256/5	Lab Control Sample	Total/NA	Water	8260B	
MB 500-124256/4	Method Blank	Total/NA	Water	8260B	

Surrogate Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Prep Type: Total/NA

Matrix: Water

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (77-112)	DBFM (78-119)	12DCE (77-124)	TOL (80-121)
500-38545-1	29540-3RD QUARTER	86	92	95	91
500-38545-1 - DL	29540-3RD QUARTER	93	103	104	98
LCS 500-124256/5	Lab Control Sample	98	105	104	99
MB 500-124256/4	Method Blank	94	101	101	97

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-124256/4							Client Sample ID: Method Blank				
Matrix: Water							Prep Type: Total/NA				
Analysis Batch: 124256											
Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050				0.0050	0.0019	mg/L			09/01/11 09:14	1
1,1-Dichloroethane	<0.0010				0.0010	0.00024	mg/L			09/01/11 09:14	1
1,1-Dichloroethene	<0.0010				0.0010	0.00029	mg/L			09/01/11 09:14	1
Tetrachloroethene	<0.0010				0.0010	0.00022	mg/L			09/01/11 09:14	1
1,1,1-Trichloroethane	<0.0010				0.0010	0.00026	mg/L			09/01/11 09:14	1
Trichloroethene	<0.00050				0.00050	0.00018	mg/L			09/01/11 09:14	1
Xylenes, Total	<0.0010				0.0010	0.00030	mg/L			09/01/11 09:14	1
trans-1,2-Dichloroethene	<0.0010				0.0010	0.00027	mg/L			09/01/11 09:14	1
cis-1,2-Dichloroethene	<0.0010				0.0010	0.00022	mg/L			09/01/11 09:14	1
MB MB											
Surrogate	% Recovery	MB	MB	% Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Sur)	94					77 - 112					1
Dibromofluoromethane	101					78 - 119					1
1,2-Dichloroethane-d4 (Sur)	101					77 - 124					1
Toluene-d8 (Sur)	97					80 - 121					1

Lab Sample ID: LCS 500-124256/5							Client Sample ID: Lab Control Sample				
Matrix: Water							Prep Type: Total/NA				
Analysis Batch: 124256											
Analyte	Spike		LCS	LCS			% Rec.				
	Added		Result	Qualifier	Unit		D	% Rec.	Limits		
Acetone	0.0500		0.0699		mg/L		140		43 - 153		
1,1-Dichloroethane	0.0500		0.0523		mg/L		105		64 - 117		
1,1-Dichloroethene	0.0500		0.0481		mg/L		96		60 - 126		
m&p-Xylene	0.100		0.104		mg/L		104		77 - 117		
o-Xylene	0.0500		0.0526		mg/L		105		74 - 117		
Tetrachloroethene	0.0500		0.0523		mg/L		105		76 - 114		
1,1,1-Trichloroethane	0.0500		0.0536		mg/L		107		66 - 128		
Trichloroethene	0.0500		0.0532		mg/L		106		75 - 116		
Xylenes, Total	0.150		0.157		mg/L		105		74 - 117		
trans-1,2-Dichloroethene	0.0500		0.0538		mg/L		108		67 - 120		
cis-1,2-Dichloroethene	0.0500		0.0541		mg/L		108		66 - 111		
LCS LCS											
Surrogate	% Recovery	MB	MB	% Recovery	Qualifier	Limits					
4-Bromofluorobenzene (Sur)	98					77 - 112					
Dibromofluoromethane	105					78 - 119					
1,2-Dichloroethane-d4 (Sur)	104					77 - 124					
Toluene-d8 (Sur)	99					80 - 121					

Certification Summary

Client: Fehr-Graham & Associates
Project/Site: 11-233

TestAmerica Job ID: 500-38545-1
SDG: 500-38545-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago	ACCLASS	DoD ELAP		ADE-1429
TestAmerica Chicago	ACCLASS	ISO/IEC 17025		AT-1428
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	Georgia EPD	4	N/A
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	Kentucky UST	4	66
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina	North Carolina DENR	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	USDA		P330-09-00027
TestAmerica Chicago	Virginia	NELAC Secondary AB	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Central IL - 1210 Capital Airport Drive - Springfield, IL 62707-8490 - Phone (217) 753-1148 - Facsimile (217) 753-1152
Chicago Office - PO Box 2116 - Crystal Lake, IL 60039-2116 - Phone (847) 651-2604 - Facsimile (847) 458-9680

www.orainiuanalytical.com

Prairie



**Analytical
Systems, INCORPORATED**

Login Sample Receipt Checklist

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Client: Fehr-Graham & Associates

Job Number: 500-38545-1
SDG Number: 500-38545-1

Login Number: 38545

List Source: TestAmerica Chicago

List Number: 1

Creator: Lunt, Jeff T

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.3
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	True	



FEHR-GRAHAM & ASSOCIATES
Engineering & Science Consultants

SOLUTIONS SINCE 1973

CERTIFIED MAIL NUMBER: 7011 2000 0001 5220 3242
RETURN RECEIPT REQUESTED

FILE COPY

221 E Main St Suite 200
Freeport IL 61032
ph 815 235 7643
fax 815 235 4632
www.fehr-graham.com

January 4, 2012

City of Ames, Iowa
Water and Pollution Control Department
300 East Fifth Street, Building 1
Ames, IA 50010

RE: Non-Domestic Waste Pretreatment Program Quarterly Report – 4th Quarter 2011
Sauer-Danfoss (US) Company
2800 East 13th Street
Ames, IA 50010
Facility Permit No. 6593-7

Dear Sir/Madam:

Enclosed, please find the Non-Domestic Waste Pretreatment Program Quarterly Report for wastewater discharge from the above-referenced facility for the 4th Quarter of 2011. Also enclosed are copies of the analytical reports from Keystone Labs and Test America for the analysis of wastewater and groundwater remediation respectively and a summary of monthly flow in gals/month from the groundwater remediation project.

Please note that the sample collected November 2, 2011, returned a violation for COD of 2,980 mg/l with a permit limit of 2,500 mg/l. A second violation for TSS of 1,580 mg/l with a permit limit of 1,500 mg/l was also noted. A sample collected December 6, 2011, returned results below the permitted limits. These results were submitted to Mr. Klocke-Sullivan, of the City of Ames, on December 16, 2011. Per the direction of Mr. Klocke-Sullivan, the original result is reported here, and the analytical reports for both are enclosed.

Should you have any questions regarding these documents, please do not hesitate to contact this office.

Sincerely,

Amy Schneiderman

Amy L. Schneiderman
Environmental Specialist

ALS:mll
K:\Sec\SEC 2012\12-313\ALS 12-313 - 4th Qtrr 2011 Wastewater to City of Ames.doc
Enclosure

cc: Sauer-Danfoss (with enclosure)

Non-Domestic Waste Pretreatment Program

Quarterly Report

(Non-Significant, Non-Domestic Contributor)

4th Quarter 2011

Reporting Period: 10/1/2011 to 12/31/2011

Submit results on or before the 10th of the month following the end of the quarter

Facility: Sauer-Danfoss
Permit No: 6593-7
Facility Contact: Gary Erickson
Facility Phone No: 515-239-6000
Sampling Location: Front Parking Lot North Manhole (Wastewater)/On-Site Wastewater Treatment
Sample Port (GW Remediation)
Sample Type: Grab & 24 Hour Composite
Sample Date: 11/29/11 (GW Remediation)/ 11/2/11 (Wastewater)

Analyte	Permit Limit Mg/L	Sample Results Mg/L
Facility	Sauer Danfoss 2800 East 13th	Sauer Danfoss 2800 East 13th
Flow	Gals/Day	29,990
pH	6-10 pH	6.40
TSS	1,500	1,580
Cyanide	0.55	< 0.007
Ammonia (NH3)	200	24.2
Total Kjeldahl Nitrogen (TKN)	250	113.0
Oil & Grease	300	105
CBOD 5	1,500	1,390
COD	2,500	2,980
Molybdenum	0.19	0.056
GW remediation	Max Expected Concentration ug/L	ug/L
Flow (remediation)	Gals/Qtrr	433,894
Acetone	44	< 5
1,1-Dichloroethane	370	4.8
1,1-Dichloroethene	170	6.6
cis- 1,2-Dichloroethene	490	34
Tetrachloroethene	1700	280
1,1,1-Trichloroethane	650	25
Trichloroethene	110	12
Total Xylenes	11	< 1

Note: Please attach sample results from Laboratory

Process or Treatment Change: None

Additional Comments: Please see attached for Groundwater Remediation Flow Data. Results for initial sample collection are reported above. Subsequent analysis was below permit limits for COD (1,810 mg/L) and TSS (815 mg/L). Analytical reports for both are attached.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed _____ Date _____
Authorized Representative

Sauer-Danfoss
Ames, IA
Groundwater Remediation Flow Data

October 2011	63,636
November 2011	265,110
December 2011	105,148
Total flow (gals) 4th Quarter:	433,894
	4,716 gpd

of days in Quarter =

92

Keystone Analytical Report

11/2/11



ANALYTICAL REPORT

November 15, 2011

Work Order: 11K0134

Page 1 of 9

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information
Date Received: 11/02/2011 11:25AM
Collector: Pryke/Swank
Phone: (515) 239-6539
PO Number: 4501784596

Project: Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11K0134-01	Front Parking Lot North Manhole			Matrix: Water		Collected: 11/02/11 08:25	
CBOD (5 day)	1390 mg/l	4	IK10301	SM 5210 B	JRP	11/03/11 7:24	
Cyanide, total	<0.007 mg/l	0.007	IK10707	4500CN-E	DRB	11/07/11 8:13	
Chemical Oxygen Demand	2980 mg/l	200	IK11034	EPA 410.4	SAI	11/11/11 15:57	
Nitrogen, Ammonia	24.2 mg/l	1.0	IK10344	SM 4500-NH3 B,E	JDK	11/04/11 13:08	
Oil/Grease, animal/vegetable	81 mg/l	4	IK11129	EPA 1664	DMC	11/11/11 16:24	
Oil/Grease, petroleum	<4 mg/l	4	IK11129	EPA 1664	DMC	11/11/11 16:24	
Oil and Grease	105 mg/l	5	IK11129	EPA 1664	DMC	11/11/11 16:24	
Nitrogen, Kjeldahl, total	113 mg/l	12.5	IK10352	EPA 351.2	DRB	11/03/11 15:28	
Solids, total suspended	1580 mg/l	40	IK10717	USGS I-3765-85	DMC	11/07/11 9:54	
Molybdenum, total	0.056 mg/l	0.050	IK10710	EPA 200.7	VJM	11/07/11 21:53	
Flow	29990 Gallons	1.0000	IK10417	Flow	JRP	11/02/11 8:25	
pH	6.4, pH	0.5	IK10417	SM 4500 II+ B	JRP	11/02/11 8:25	
Temperature	14.1 °C	0.00	IK10417	SM 2550 B	JRP	11/02/11 8:25	

• COD exceeded
limit = 2,500
sauer = 2,980

• TSS exceeded
limit = 1,500
sauer = 1,580

* Submitted to Michael
Klocke-Sullivan on
11-28-11.

The results in this report apply to the samples analyzed in accordance with the chain of custody do its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise.



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

November 15, 2011

Page 2 of 9

Work Order: 11K0134

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

Batch 1K10301 - General Prep Micro

Blank (1K10301-BLK1)					Prepared & Analyzed: 11/03/11					
CBOD (5 day)	ND	4	mg/l							
Duplicate (1K10301-DUP1)				Source: 11K0167-01	Prepared & Analyzed: 11/03/11					
CBOD (5 day)	15.0	4	mg/l		15.0			0.00	30	
Duplicate (1K10301-DUP2)				Source: 11K0168-02	Prepared & Analyzed: 11/03/11					
CBOD (5 day)	220	4	mg/l		285			25.7	30	
Reference (1K10301-SRM1)					Prepared & Analyzed: 11/03/11					
CBOD (5 day)	388	4	mg/l	395.340		98.1	84.6-115.4			

Batch 1K10344 - Wet Chem Preparation

Blank (1K10344-BLK1)					Prepared: 11/03/11 Analyzed: 11/04/11					
Nitrogen, Ammonia	ND	1.0	mg/l							
LCS (1K10344-BS1)					Prepared: 11/03/11 Analyzed: 11/04/11					
Nitrogen, Ammonia	10.0	1.0	mg/l	10.0000		99.6	87-110			
Matrix Spike (1K10344-MS1)				Source: 11K0142-02	Prepared: 11/03/11 Analyzed: 11/04/11					
Nitrogen, Ammonia	11.3	1.0	mg/l	10.0000	0.9	104	85-110			
Matrix Spike Dup (1K10344-MSD1)				Source: 11K0142-02	Prepared: 11/03/11 Analyzed: 11/04/11					
Nitrogen, Ammonia	10.9	1.0	mg/l	10.0000	0.9	99.6	85-110	4.14	10	
Reference (1K10344-SRM1)					Prepared: 11/03/11 Analyzed: 11/04/11					
Nitrogen, Ammonia	10.1	1.0	mg/l	10.0000		101	75-125			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

November 15, 2011

Page 3 of 9

Work Order: 11K0134

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1K10352 - Wet Chem Preparation

<u>Blank (1K10352-BLK1)</u>					Prepared & Analyzed: 11/03/11					
Nitrogen, Kjeldahl, total	ND	0.50	mg/l							
<u>LCS (1K10352-BS1)</u>					Prepared & Analyzed: 11/03/11					
Nitrogen, Kjeldahl, total	18.4	0.50	mg/l	20.000	91.9	82-116				
<u>Matrix Spike (1K10352-MIS1)</u>		Source: 11K0059-01			Prepared & Analyzed: 11/03/11					
Nitrogen, Kjeldahl, total	13.1	0.50	mg/l	10.000	2.88	102	81-124			
<u>Matrix Spike Dup (1K10352-MSD1)</u>		Source: 11K0059-01			Prepared & Analyzed: 11/03/11					
Nitrogen, Kjeldahl, total	13.2	0.50	mg/l	10.000	2.88	104	81-124	1.06	11	

Batch 1K10707 - Wet Chem Preparation

<u>Blank (1K10707-BLK1)</u>					Prepared & Analyzed: 11/07/11					
Cyanide, total	ND	0.007	mg/l							
<u>LCS (1K10707-BS1)</u>					Prepared & Analyzed: 11/07/11					
Cyanide, total	0.028	0.007	mg/l	0.0252000	111	86-123				
<u>Matrix Spike (1K10707-MIS1)</u>		Source: 11K0168-01			Prepared & Analyzed: 11/07/11					
Cyanide, total	0.032	0.007	mg/l	0.0252000	0.004	112	76-129			
<u>Matrix Spike Dup (1K10707-MSD1)</u>		Source: 11K0168-01			Prepared & Analyzed: 11/07/11					
Cyanide, total	0.032	0.007	mg/l	0.0252000	0.004	110	76-129	1.42	11	

Batch 1K10717 - Wet Chem Preparation

<u>Blank (1K10717-BLK1)</u>					Prepared & Analyzed: 11/07/01					
Solids, total suspended	ND	1	mg/l							

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

November 15, 2011

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Work Order: 11K0134

Determination of Conventional Chemistry Parameters - Quality Control

Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

Batch 1K10717 - Wet Chem Preparation

LCS (1K10717-BS1)					Prepared & Analyzed: 11/07/01				
Solids, total suspended	15.2	1	mg/l	15.0000	101	67-111			
Duplicate (1K10717-DUP1)		Source: 11K0144-01			Prepared & Analyzed: 11/07/01				
Solids, total suspended	106	10	mg/l	86.0		20.8	30		

Batch 1K11034 - Wet Chem Preparation

Blank (1K11034-BLK1)					Prepared: 11/10/11 Analyzed: 11/11/11				
Chemical Oxygen Demand	ND	10	mg/l						
LCS (1K11034-BS1)					Prepared: 11/10/11 Analyzed: 11/11/11				
Chemical Oxygen Demand	70.6	10	mg/l	78.5000	89.9	79-110			
Matrix Spike (1K11034-MS1)		Source: 11K0219-03			Prepared: 11/10/11 Analyzed: 11/11/11				
Chemical Oxygen Demand	187	40	mg/l	157.000	26.0	103	60-140		
Matrix Spike Dup (1K11034-MSD1)		Source: 11K0219-03			Prepared: 11/10/11 Analyzed: 11/11/11				
Chemical Oxygen Demand	196	40	mg/l	157.000	26.0	108	60-140	4.53	26

Batch 1K11129 - Wet Chem Preparation

Blank (1K11129-BLK1)					Prepared & Analyzed: 11/11/11				
Oil and Grease	ND	4	mg/l						
Oil/Grease, animal/vegetable	ND	4	"						
Oil/Grease, petroleum	ND	4	"						

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11K0134

November 15, 2011
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Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1K11129 - Wet Chem Preparation										
LCS (1K11129-BS1)										
Prepared & Analyzed: 11/11/11										
Oil and Grease	35	4	mg/l	40.0000	87.5	78-114				
Oil/Grease, animal/vegetable	15	4	"	20.0000	74.0	64-132				
Oil/Grease, petroleum	15	4	"	20.0000	76.0	64-132				
Matrix Spike (1K11129-MS1)										
Source: 11K0522-01 Prepared & Analyzed: 11/11/11										
Oil and Grease	39	4	mg/l	40.0000	4	87.6	78-114			
Oil/Grease, animal/vegetable	22	4	"	20.0000	2	102	64-132			
Oil/Grease, petroleum	16	4	"	20.0000	2	73.0	64-132			
Matrix Spike Dup (1K11129-MSD1)										
Source: 11K0522-01 Prepared & Analyzed: 11/11/11										
Oil and Grease	36	4	mg/l	40.0000	4	79.6	78-114	8.60	18	
Oil/Grease, animal/vegetable	21	4	"	20.0000	2	96.0	64-132	5.95	34	
Oil/Grease, petroleum	14	4	"	20.0000	2	63.5	64-132	12.4	34	QM-12

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

November 15, 2011

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Work Order: 11K0134

Determination of Total Metals - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit	Notes
Batch 1K10710 - EPA 3010A Total ICP									
Blank (1K10710-BLK1)									
Molybdenum, total	ND	0.010	mg/l						
LCS (1K10710-BS1)									
Molybdenum, total	0.209	0.010	mg/l	0.200000		104	85-115		
Matrix Spike (1K10710-MS1)									
Molybdenum, total	0.210	0.010	mg/l	0.200000	0.00531	102	70-130		
Matrix Spike Dup (1K10710-MSD1)									
Molybdenum, total	0.203	0.010	mg/l	0.200000	0.00531	98.9	70-130	3.08	20
Post Spike (1K10710-PS1)									
Molybdenum, total	0.202		mg/l	0.200000	0.00526	98.4	85-115		

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11K0134

November 15, 2011
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Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
<i>4500CN-E in Water</i>	Cyanide, total	KS-NT,NELAC,SIA1X
<i>EPA 1664 in Water</i>	Oil and Grease	KS-NT,NELAC,SIA1X
	Oil/Grease, animal/vegetable	KS-NT,NELAC,SIA1X
	Oil/Grease, petroleum	KS-NT,NELAC,SIA1X
<i>EPA 200.7 in Water</i>	Molybdenum, total	NELAC,SIA1X,KS-NT
<i>EPA 351.2 in Water</i>	Nitrogen, Kjeldahl, total	SIA1X
<i>EPA 410.4 in Water</i>	Chemical Oxygen Demand	KS-NT,NELAC,SIA1X
<i>SM 2550 B in Water</i>	Temperature	SIA1X
<i>SM 4500-NH3 B,E in Water</i>	Nitrogen, Ammonia	KS-NT,NELAC
<i>SM 5210 B in Water</i>	CBOD (5 day)	SIA1X
<i>USGS I-3765-85 in Water</i>	Solids, total suspended	SIA1X,NELAC,KS-NT

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2012
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2012
MO-KC	Missouri Department of Natural Resources	140	04/30/2012
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2012
SIA1X	Iowa Department of Natural Resources	95	02/01/2012

Notes and Definitions

QM-12 The spike recovery was outside acceptance limits for the MS and/or MSD.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.



MEMBER
ACIE

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

November 15, 2011

Page 8 of 9

Work Order: 11K0134

End of Report

Sue Thompson

Keystone Laboratories, Inc.

Sue Thompson
Project Manager II

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Keystone

LABORATORIES, INC.



M E M B E R
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11K0134

November 15, 2011
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Printed: 10/3/2011 2:16:00PM

CHAIN OF CUSTODY RECORD

Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451
FAX: 641-792-7989

SITE INFORMATION

Sampler: *Pryka/Swank*

Project: Quarterly Waste Pretreatment
Pretreatment

REPORT TO

Gary Erickson
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

INVOICE TO

Accounts Payable
Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___ / ___ / ___

LAB USE ONLY

Work Order 11K0134

Temperature

Turn-Cooler: No

- Custody Seal
- Containers Intact
- COC/Labels Agree
- Preservation Confirmed
- Received On Ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Temp	Flow	pH	Analyses	Lab Sample Number
01-001	Front Parking Lot North Manhole	Water		11/2/11	8:25				temperature mo-t-200.7 chnd-5210 cod-t-410.4 tkn-351.2 flow-total	og-profile-1664 nh3-4500be cn-t-4500c ph-field-4500 tsa-i-3765-85
										O

Jon R. Pyle 11/2/11 11:25

Relinquished By Date/Time

Relinquished By Date/Time

Remarks:

Received By Date/Time

Received for Lab By Date/Time

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL = Method Reporting Limit.

Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989

Keystone Analytical Report

12/6/11



ANALYTICAL REPORT

December 14, 2011

Work Order: 11L0270

Page 1 of 4

Report To
Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010

Work Order Information
Date Received: 12/06/2011 12:20PM
Collector: Pryke/Swank
Phone: (515) 239-6539
PO Number: 4501784596

Project : Quarterly Waste Pretreatment

Project Number: Pretreatment

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
11L0270-01	Front Parking Lot North Manhole			Matrix:Water		Collected: 12/06/11 08:30	
Chemical Oxygen Demand	1810 mg/l	200	IL11202	EPA 410.4	SAI	12/13/11 11:25	
Solids, total suspended	816 mg/l	40	IL10902	USGS I-3765-85	SAI	12/09/11 7:57	
Flow	3000.0 Gallons	1.0000	IL11314	Flow	JRP	12/06/11 8:30	
pH	8.0 pH	0.5	IL11314	SM 4500 H+ B	JRP	12/06/11 8:30	

Resample from
Keystone

* submitted to Michael
Klocke-Sullivan on
12-16-11.

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Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

December 14, 2011

Page 2 of 4

Work Order: 11L0270

Determination of Conventional Chemistry Parameters - Quality Control
Keystone Laboratories, Inc. - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-------------

Batch 1L10902 - Wet Chem Preparation

Blank (1L10902-BLK1)					Prepared & Analyzed: 12/09/11				
Solids, total suspended	ND	1	mg/l						
LCS (1L10902-BS1)					Prepared & Analyzed: 12/09/11				
Solids, total suspended	13.1	1	mg/l	15.0000		87.3	67-111		

Duplicate (1L10902-DUP1)

Source: 11L0194-01 Prepared & Analyzed: 12/09/11

Solids, total suspended	7960	200	mg/l	9740		20.1	30		
-------------------------	------	-----	------	------	--	------	----	--	--

Batch 1L11202 - Wet Chem Preparation

Blank (1L11202-BLK1)					Prepared: 12/11/01 Analyzed: 12/13/11				
Chemical Oxygen Demand	ND	10	mg/l						
LCS (1L11202-BS1)					Prepared: 12/11/01 Analyzed: 12/13/11				
Chemical Oxygen Demand	71.2	10	mg/l	78.5000		90.7	79-110		
Matrix Spike (1L11202-MS1)					Prepared: 12/11/01 Analyzed: 12/13/11				
Chemical Oxygen Demand	161	40	mg/l	157.000	23.5	87.5	60-140		
Matrix Spike Dup (1L11202-MSD1)					Prepared: 12/11/01 Analyzed: 12/13/11				
Chemical Oxygen Demand	171	40	mg/l	157.000	23.5	93.8	60-140	5.97	26

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

Certified Analyses included in this Report

Method/Matrix	Analyte	Certifications
EPA 410.4 in Water	Chemical Oxygen Demand	KS-NT,NELAC,SIA1X
USGS I-3765-85 in Water	Solids, total suspended	SIA1X,NELAC,KS-NT

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MEMBER
ACIL

Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11L0270

December 14, 2011
Page 3 of 4

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2012
KS-NT	Kansas Department of Health and Environment	E-10287	10/30/2012
MO-KC	Missouri Department of Natural Resources	140	04/30/2012
NELAC	New Jersey Department of Environmental Protection	IA001	06/30/2012
SIA1X	Iowa Department of Natural Resources	95	02/01/2012

End of Report

Keystone Laboratories, Inc.

Sue Thompson
Project Manager II

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Phone 641-792-8451

600 East 17th Street South
Newton, IA 50208

Fax 641-792-7989



Sauer-Danfoss
2800 E. 13th St.
Ames, IA 50010

Work Order: 11L0270

December 14, 2011
Page 4 of 4

CHAIN OF CUSTODY RECORD																																																						
<p>Printed: 11/30/2011 2:19:07PM</p> <p>Page 1 of 1</p> <p>SITE INFORMATION</p> <p>Sampler: <u>Rylee Sauer</u> Project: Quarterly Waste Pretreatment</p> <p>600 East 17th Street South Newton, IA 50208 Phone: 641-792-8451 FAX: 641-792-7989</p>			<p>REPORT TO</p> <p>Gary Erickson Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010</p> <p>INVOICE TO</p> <p>Accounts Payable Sauer-Danfoss 2800 E. 13th St. Ames, IA 50010</p>			<p>LAB USE ONLY</p> <p>Work Order <u>11L0270</u></p> <p>Temperature _____</p> <p>Turn-Cooler: No</p> <p>Custody Seal Containers intact COCs/Labels Agree Preservation Confirmed Received On Ice</p> <table border="1"> <thead> <tr> <th>Sample</th> <th>Type</th> <th>Date</th> <th>Time</th> <th>Temp</th> <th>Flow</th> <th>pH</th> <th>Analyses</th> <th>Lab Sample Number</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>Water</td> <td>12/1/11</td> <td>8:36</td> <td></td> <td></td> <td></td> <td>temperature temp=24.00 dissolved oxygen=5.23 pH=7.410.4 tss=3.765.85 flow=totl</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Sample	Type	Date	Time	Temp	Flow	pH	Analyses	Lab Sample Number	01	Water	12/1/11	8:36				temperature temp=24.00 dissolved oxygen=5.23 pH=7.410.4 tss=3.765.85 flow=totl																												
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<p>SPECIAL INSTRUCTIONS</p> <p>None</p> <p>Turn Around Time <input checked="" type="checkbox"/> RUSH, need by <u>/</u> <input type="checkbox"/> Standard</p>																																																						
<p>Number Sample Identification / Client ID Matrix Type Date Time Temp Flow pH Analyses Lab Sample Number</p> <p>01-001 Front Parking Lot North Manhole Water 12/1/11 8:36 temperature temp=24.00 dissolved oxygen=5.23 pH=7.410.4 tss=3.765.85 flow=totl 01</p>																																																						
<p><u>12/06/11 1:20</u> Relinquished By _____ Date/Time _____</p> <p><u>12/06/11 1:20</u> Received for Lab By _____ Date/Time _____</p>					<p>Remarks: _____</p>																																																	

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Test America Analytical Report

11/29/11

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

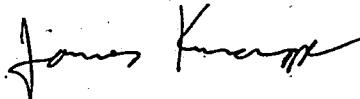
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-42729-1
TestAmerica Sample Delivery Group: 500-42729-1
Client Project/Site: FGA Project 11-233
Revision: 1

For:
Fehr-Graham & Associates
221 E. Main Street, Suite 200
Freeport, Illinois 61032-4201

Attn: Ms. Amy Schneiderman



Authorized for release by:
12/28/2011 3:42:06 PM
Jim Knapp
Customer Service Manager
jim.knapp@testamericainc.com
Designee for
Donna Ingersoll
Project Manager II
donna.ingersoll@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Job ID: 500-42729-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative 500-42729-1

Comments

No additional comments.

Receipt

Report revised to correct results for Trichloroethene and 1,1,1-Trichloroethane. In the initial report, 1,1,1-Trichloroethane and Trichloroethene were reported as non-detect. During a supervisor review of data, it was discovered that these two compounds were not integrated properly by the data system. In addition, the analyst failed to identify the problem during his review. The data has been corrected and a new report will be issued. Corrective action procedures are being instituted to prevent future occurrences of this problem.

All other samples were received in good condition within temperature requirements.

GC/MS VOA

No analytical or quality issues were noted.

Detection Summary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Client Sample ID: 29760-4TH QUARTER

Lab Sample ID: 500-42729-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.0048		0.0010	0.00024	mg/L	1	8260B		Total/NA
1,1-Dichloroethene	0.0066		0.0010	0.00029	mg/L	1	8260B		Total/NA
1,1,1-Trichloroethane	0.025		0.0010	0.00026	mg/L	1	8260B		Total/NA
Trichloroethene	0.012		0.00050	0.00018	mg/L	1	8260B		Total/NA
cis-1,2-Dichloroethene	0.034		0.0010	0.00022	mg/L	1	8260B		Total/NA
Tetrachloroethene - DL	0.28		0.0050	0.0011	mg/L	5	8260B		Total/NA

Method Summary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-42729-1	29760-4TH QUARTER	Water	11/29/11 16:45	11/30/11 10:00

Client Sample Results

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Client Sample ID: 29760-4TH QUARTER

Lab Sample ID: 500-42729-1
Matrix: Water

Date Collected: 11/29/11 16:45
Date Received: 11/30/11 10:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0019	mg/L			12/07/11 11:23	1
1,1-Dichloroethane	0.0048		0.0010	0.00024	mg/L			12/07/11 11:23	1
1,1-Dichloroethene	0.0066		0.0010	0.00029	mg/L			12/07/11 11:23	1
1,1,1-Trichloroethane	0.025	-	0.0010	0.00026	mg/L			12/07/11 11:23	1
Trichloroethene	0.012	-	0.00050	0.00018	mg/L			12/07/11 11:23	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			12/07/11 11:23	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00027	mg/L			12/07/11 11:23	1
cis-1,2-Dichloroethene	0.034		0.0010	0.00022	mg/L			12/07/11 11:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Sur)	99		77 - 112					12/07/11 11:23	1
Dibromofluoromethane	98		78 - 119					12/07/11 11:23	1
1,2-Dichloroethane-d4 (Sur)	103		77 - 124					12/07/11 11:23	1
Toluene-d8 (Sur)	99		80 - 121					12/07/11 11:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.28		0.0050	0.0011	mg/L			12/06/11 13:42	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Sur)	98		77 - 112					12/06/11 13:42	5
Dibromofluoromethane	96		78 - 119					12/06/11 13:42	5
1,2-Dichloroethane-d4 (Sur)	101		77 - 124					12/06/11 13:42	5
Toluene-d8 (Sur)	90		80 - 121					12/06/11 13:42	5

Definitions/Glossary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

GC/MS VOA

Analysis Batch: 134709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-42729-1 - DL	29760-4TH QUARTER	Total/NA	Water	8260B	
LCS 500-134709/5	Lab Control Sample	Total/NA	Water	8260B	
MB 500-134709/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 134863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-42729-1	29760-4TH QUARTER	Total/NA	Water	8260B	
LCS 500-134863/5	Lab Control Sample	Total/NA	Water	8260B	
MB 500-134863/4	Method Blank	Total/NA	Water	8260B	

Surrogate Summary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		BFB (77-112)	DBFM (78-119)	12DCE (77-124)	TOL (80-121)
500-42729-1 - DL	29760-4TH QUARTER	98	96	101	90
500-42729-1	29760-4TH QUARTER	99	98	103	99
LCS 500-134709/5	Lab Control Sample	96	94	99	91
LCS 500-134863/5	Lab Control Sample	103	98	98	99
MB 500-134709/4	Method Blank	100	96	104	97
MB 500-134863/4	Method Blank	99	99	104	105

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-134709/4

Matrix: Water

Analysis Batch: 134709

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050		0.0019	mg/L				12/06/11 09:51	1
1,1-Dichloroethane	<0.0010		0.0010		0.00024	mg/L				12/06/11 09:51	1
1,1-Dichloroethene	<0.0010		0.0010		0.00029	mg/L				12/06/11 09:51	1
Tetrachloroethene	<0.0010		0.0010		0.00022	mg/L				12/06/11 09:51	1
1,1,1-Trichloroethane	<0.0010		0.0010		0.00026	mg/L				12/06/11 09:51	1
Trichloroethene	<0.00050		0.00050		0.00018	mg/L				12/06/11 09:51	1
Xylenes, Total	<0.0010		0.0010		0.00030	mg/L				12/06/11 09:51	1
trans-1,2-Dichloroethene	<0.0010		0.0010		0.00027	mg/L				12/06/11 09:51	1
cis-1,2-Dichloroethene	<0.0010		0.0010		0.00022	mg/L				12/06/11 09:51	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	100		77 - 112				12/06/11 09:51	1
Dibromofluoromethane	96		78 - 119				12/06/11 09:51	1
1,2-Dichloroethane-d4 (Sur)	104		77 - 124				12/06/11 09:51	1
Toluene-d8 (Sur)	97		80 - 121				12/06/11 09:51	1

Lab Sample ID: LCS 500-134709/5

Matrix: Water

Analysis Batch: 134709

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Acetone	0.0500	0.0390		mg/L	78	43 - 153	
1,1-Dichloroethane	0.0500	0.0411		mg/L	82	64 - 117	
1,1-Dichloroethene	0.0500	0.0401		mg/L	80	60 - 126	
m&p-Xylene	0.100	0.0897		mg/L	90	77 - 117	
o-Xylene	0.0500	0.0456		mg/L	91	74 - 117	
Tetrachloroethene	0.0500	0.0506		mg/L	101	76 - 114	
1,1,1-Trichloroethane	0.0500	0.0444		mg/L	89	66 - 128	
Trichloroethene	0.0500	0.0434		mg/L	87	75 - 116	
Xylenes, Total	0.150	0.135		mg/L	90	74 - 117	
trans-1,2-Dichloroethene	0.0500	0.0435		mg/L	87	67 - 120	
cis-1,2-Dichloroethene	0.0500	0.0428		mg/L	86	66 - 111	

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Sur)	96		77 - 112		
Dibromofluoromethane	94		78 - 119		
1,2-Dichloroethane-d4 (Sur)	99		77 - 124		
Toluene-d8 (Sur)	91		80 - 121		

Lab Sample ID: MB 500-134863/4

Matrix: Water

Analysis Batch: 134863

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050		0.0019	mg/L				12/07/11 09:29	1
1,1-Dichloroethane	<0.0010		0.0010		0.00024	mg/L				12/07/11 09:29	1
1,1-Dichloroethene	<0.0010		0.0010		0.00029	mg/L				12/07/11 09:29	1
Tetrachloroethene	<0.0010		0.0010		0.00022	mg/L				12/07/11 09:29	1
1,1,1-Trichloroethane	<0.0010		0.0010		0.00026	mg/L				12/07/11 09:29	1

Client Sample ID: Method Blank
Prep Type: Total/NA

QC Sample Results

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-134863/4

Matrix: Water

Analysis Batch: 134863

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.00050		0.00050	0.00018	mg/L			12/07/11 09:29	1
Xylenes, Total	<0.0010		0.0010	0.00030	mg/L			12/07/11 09:29	1
trans-1,2-Dichloroethene	<0.0010		0.0010	0.00027	mg/L			12/07/11 09:29	1
cis-1,2-Dichloroethene	<0.0010		0.0010	0.00022	mg/L			12/07/11 09:29	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Sur)	99		77 - 112					12/07/11 09:29	1
Dibromofluoromethane	99		78 - 119					12/07/11 09:29	1
1,2-Dichloroethane-d4 (Sur)	104		77 - 124					12/07/11 09:29	1
Toluene-d8 (Sur)	105		80 - 121					12/07/11 09:29	1

Lab Sample ID: LCS 500-134863/5

Matrix: Water

Analysis Batch: 134863

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Acetone	0.0500	0.0497		mg/L		99	43 - 153
1,1-Dichloroethane	0.0500	0.0453		mg/L		91	64 - 117
1,1-Dichloroethene	0.0500	0.0441		mg/L		88	60 - 126
m&p-Xylene	0.100	0.105		mg/L		105	77 - 117
o-Xylene	0.0500	0.0520		mg/L		104	74 - 117
Tetrachloroethene	0.0500	0.0534		mg/L		107	76 - 114
1,1,1-Trichloroethane	0.0500	0.0497		mg/L		99	66 - 128
Trichloroethene	0.0500	0.0526		mg/L		105	75 - 116
Xylenes, Total	0.150	0.157		mg/L		104	74 - 117
trans-1,2-Dichloroethene	0.0500	0.0475		mg/L		95	67 - 120
cis-1,2-Dichloroethene	0.0500	0.0489		mg/L		98	66 - 111
Surrogate	%Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Sur)	103		77 - 112				
Dibromofluoromethane	98		78 - 119				
1,2-Dichloroethane-d4 (Sur)	98		77 - 124				
Toluene-d8 (Sur)	99		80 - 121				

Certification Summary

Client: Fehr-Graham & Associates
Project/Site: FGA Project 11-233

TestAmerica Job ID: 500-42729-1
SDG: 500-42729-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago	ACCLASS	DoD ELAP		ADE-1429
TestAmerica Chicago	ACCLASS	ISO/IEC 17025		AT-1428
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	Georgia EPD	4	N/A
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	Kentucky UST	4	66
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina	North Carolina DENR	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	USDA		P330-09-00027
TestAmerica Chicago	Virginia	NELAC Secondary AB	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Chain of Custody Record

Central IL - 1210 Capitol Airport Drive - Springfield, IL 62707-8490 • Phone (217) 753-1148 • Facsimile (217) 753-1150
Chicago Office - PO Box 2116 • Crystal Lake, IL 60038-2116 • Phone (847) 651-2604 • Facsimile (847) 458-9680

www.prairieanalytical.com



500-42729

Login Sample Receipt Checklist

Client: Fehr-Graham & Associates

Job Number: 500-42729-1
SDG Number: 500-42729-1

Login Number: 42729

List Source: TestAmerica Chicago

List Number: 1

Creator: Lunt, Jeff T

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background.	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	2.6
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	

ATTACHMENT 3

Laboratory Report for July 18, 2011 Resampling Event

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

August 08, 2011

Client:

FEHR-GRAHAM & ASSOCIATES - FREEPORT
221 E. Main Street, Ste. 200
Freeport, IL 61032

Attn: Jeff Ogden

Work Order: CUG0939
Project Name: Sauer Danfoss - Ames, Iowa
Project Number: 10-500

Date Received: 07/18/11

The Chain(s) of Custody, 4 pages, are included and are an integral part of this report.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(800)750-2401

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
29433 MW-33	CUG0939-01	07/17/11 16:47
29436 MW-5	CUG0939-02	07/17/11 19:57
29437 MW-R65	CUG0939-03	07/17/11 21:24
29438 Dup	CUG0939-04	07/17/11
29439 Equip Blank	CUG0939-05	07/17/11 22:03
29440 - Trip Blank	CUG0939-06	07/17/11

Samples were received into laboratory at a temperature of 5.50 °C.

NELAC states that samples which require thermal preservation shall be considered acceptable if the arrival temperature is within 2 degrees C of the required temperature or the method specified range. For samples with a temperature requirement of 4 degrees C, an arrival temperature from 0 degrees C to 6 degrees C meets specifications. Samples that are delivered to the laboratory on the same day that they are collected may not meet these criteria. In these cases, the samples are considered acceptable if there is evidence that the chilling process has begun, such as arrival on ice.

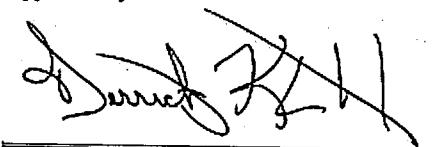
Please refer to the Temperature and Sample Receipt form that is included with this report for additional information regarding the condition of samples at the time of receipt by the laboratory.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the specific sample analyzed.

Approved By:



TestAmerica Cedar Falls
Derrick Klinkenberg
Organics Manager

FEHR-GRAHAM & ASSOCIATES - FREEPORT
 221 E. Main Street, Ste. 200
 Freeport, IL 61032
 Jeff Ogden

Work Order: CUG0939
 Project: Sauer Danfoss - Ames, Iowa
 Project Number: 10-500

Received: 07/18/11
 Reported: 08/08/11 09:37

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Units	Quan. Limit	Dilution Factor	Date Analyzed	Analyst	Seq/Batch	Method
Sample ID: CUG0939-01 (29433 MW-33 - Ground Water)							Sampled: 07/17/11 16:47		
Volatile Organic Compounds									
Acetone	<10.0		ug/L	10.0	1	07/19/11 23:19	sjn	11G0801	SW 8260B
1,1-Dichloroethane	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
cis-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
Methylene Chloride	<5.00		ug/L	5.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
Tetrachloroethene	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
1,1,1-Trichloroethane	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
Trichloroethene	<1.00		ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
Vinyl chloride	<1.00	C9	ug/L	1.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
Xylenes, total	<3.00	R	ug/L	3.00	1	07/19/11 23:19	sjn	11G0801	SW 8260B
Surr: Dibromofluoromethane (75-120%)	99 %								
Surr: Toluene-d8 (80-120%)	102 %								
Surr: 4-Bromofluorobenzene (75-110%)	100 %								
VOC Preservation Check									
pH	<2.00		units	2.00	1	07/20/11 13:46	eee	11G0818	SW
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)									
1,4-Dioxane	<6.0		ug/l	6.0	1	07/25/11 15:56	GMK	11G2849	EPA 8260B-SIM
Surr: Dibromofluoromethane (80-120%)	102 %								
Sample ID: CUG0939-02 (29436 MW-5 - Ground Water)							Sampled: 07/17/11 19:57		
Volatile Organic Compounds									
Acetone	<10.0		ug/L	10.0	1	07/20/11 11:38	sjn	11G0844	SW 8260B
1,1-Dichloroethane	2.13		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
cis-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
Methylene Chloride	<5.00		ug/L	5.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
Tetrachloroethene	<1.00		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
1,1,1-Trichloroethane	1.81		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
Trichloroethene	1.33		ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
Vinyl chloride	<1.00	C9	ug/L	1.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
Xylenes, total	<3.00		ug/L	3.00	1	07/20/11 11:38	sjn	11G0844	SW 8260B
Surr: Dibromofluoromethane (75-120%)	94 %								
Surr: Toluene-d8 (80-120%)	98 %								
Surr: 4-Bromofluorobenzene (75-110%)	102 %								
VOC Preservation Check									
pH	<2.00		units	2.00	1	07/20/11 13:46	eee	11G0818	SW
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)									

FEHR-GRAHAM & ASSOCIATES - FREEPORT
 221 E. Main Street, Ste. 200
 Freeport, IL 61032
 Jeff Ogden

Work Order: CUG0939
 Project: Sauer Danfoss - Ames, Iowa
 Project Number: 10-500

Received: 07/18/11
 Reported: 08/08/11 09:37

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Units	Quan. Limit	Dilution Factor	Date Analyzed	Analyst	Seq/Batch	Method
Sample ID: CUG0939-02 (29436 MW-5 - Ground Water) - cont.									
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM) - cont.									
1,4-Dioxane	<6.0		ug/l	6.0	1	07/25/11 17:55	GMK	11G2849	EPA 8260B-SIM
Surr: Dibromofluoromethane (80-120%)	98 %								
Sample ID: CUG0939-03 (29437 MW-R65 - Ground Water)									
Volatile Organic Compounds									
Acetone	<10.0		ug/L	10.0	1	07/20/11 12:00	sjn	11G0844	SW 8260B
1,1-Dichloroethane	1.83		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
cis-1,2-Dichloroethene	95.3		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
Methylene Chloride	<5.00		ug/L	5.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
Tetrachloroethene	209		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
1,1,1-Trichloroethane	1.96		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
Trichloroethene	16.6		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
Vinyl chloride	<1.00		ug/L	1.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
Xylenes, total	<3.00		ug/L	3.00	1	07/20/11 12:00	sjn	11G0844	SW 8260B
Surr: Dibromofluoromethane (75-120%)	96 %								
Surr: Toluene-d8 (80-120%)	98 %								
Surr: 4-Bromofluorobenzene (75-110%)	100 %								
VOC Preservation Check									
pH	<2.00		units	2.00	1	07/20/11 13:46	eee	11G0818	SW
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)									
1,4-Dioxane	<6.0		ug/l	6.0	1	07/25/11 17:14	GMK	11G2862	EPA 8260B-SIM
Surr: Dibromofluoromethane (80-120%)	109 %								
Sample ID: CUG0939-04 (29438 Dup - Ground Water)									
Volatile Organic Compounds									
Acetone	<10.0		ug/L	10.0	1	07/20/11 14:14	sjn	11G0844	SW 8260B
1,1-Dichloroethane	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
cis-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
Methylene Chloride	<5.00		ug/L	5.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
Tetrachloroethene	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
1,1,1-Trichloroethane	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
Trichloroethene	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
Vinyl chloride	<1.00		ug/L	1.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
Xylenes, total	<3.00		ug/L	3.00	1	07/20/11 14:14	sjn	11G0844	SW 8260B
Surr: Dibromofluoromethane (75-120%)	95 %								

FEHR-GRAHAM & ASSOCIATES - FREEPORT
 221 E. Main Street, Ste. 200
 Freeport, IL 61032
 Jeff Ogden

Work Order: CUG0939
 Project: Sauer Danfoss - Ames, Iowa
 Project Number: 10-500

Received: 07/18/11
 Reported: 08/08/11 09:37

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Quan. Limit Units	Dilution Factor	Date Analyzed	Analyst	Seq/Batch	Method
Sample ID: CUG0939-04 (29438 Dup - Ground Water) - cont.						Sampled: 07/17/11	Revd: 07/18/11 18:00	
Volatile Organic Compounds - cont.								
Surr: Toluene-d8 (80-120%)	98 %							
Surr: 4-Bromofluorobenzene (75-110%)	102 %							
VOC Preservation Check								
pH	<2.00		units	2.00	1	07/20/11 13:46	eee	11G0818 SW
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)								
1,4-Dioxane	<6.0		ug/l	6.0	1	07/25/11 17:43	GMK	11G2862 EPA 8260B-SIM
Surr: Dibromoformmethane (80-120%)	102 %							
Sample ID: CUG0939-05 (29439 Equip Blank - Ground Water)						Sampled: 07/17/11 22:03	Revd: 07/18/11 18:00	
Volatile Organic Compounds								
Acetone	<10.0		ug/L	10.0	1	07/20/11 12:45	sjn	11G0844 SW 8260B
1,1-Dichloroethane	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
cis-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
Methylene Chloride	<5.00		ug/L	5.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
Tetrachloroethene	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
1,1,1-Trichloroethane	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
Trichloroethene	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
Vinyl chloride	<1.00		ug/L	1.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
Xylenes, total	<3.00		ug/L	3.00	1	07/20/11 12:45	sjn	11G0844 SW 8260B
Surr: Dibromoformmethane (75-120%)	96 %							
Surr: Toluene-d8 (80-120%)	98 %							
Surr: 4-Bromofluorobenzene (75-110%)	101 %							
VOC Preservation Check								
pH	<2.00		units	2.00	1	07/20/11 13:46	eee	11G0818 SW
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)								
1,4-Dioxane	<6.0		ug/l	6.0	1	07/25/11 18:12	GMK	11G2862 EPA 8260B-SIM
Surr: Dibromoformmethane (80-120%)	102 %							

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

FEHR-GRAHAM & ASSOCIATES - FREEPORT
221 E. Main Street, Ste. 200
Freeport, IL 61032
Jeff Ogden

Work Order: CUG0939

Received: 07/18/11
Reported: 08/08/11 09:37

Project: Sauer Danfoss - Ames, Iowa
Project Number: 10-500

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Quan. Units	Limit	Dilution Factor	Date Analyzed	Analyst	Seq/Batch	Method
Sample ID: CUG0939-06 (29440 - Trip Blank - Water)									
Volatile Organic Compounds									
Acetone	<10.0		ug/L	10.0	1	07/19/11 22:53	sjn	11G0801	SW 8260B
1,1-Dichloroethane	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
cis-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
Methylene Chloride	<5.00		ug/L	5.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
Tetrachloroethene	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
1,1,1-Trichloroethane	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
Trichloroethene	<1.00		ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
Vinyl chloride	<1.00	C9	ug/L	1.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
Xylenes, total	<3.00		ug/L	3.00	1	07/19/11 22:53	sjn	11G0801	SW 8260B
Surr: Dibromoformmethane (75-120%)	97 %								
Surr: Toluene-d8 (80-120%)	99 %								
Surr: 4-Bromofluorobenzene (75-110%)	103 %								
VOC Preservation Check									
pH	<2.00		units	2.00	1	07/20/11 13:46	eee	11G0818	SW

FEHR-GRAHAM & ASSOCIATES - FREEPORT
 221 E. Main Street, Ste. 200
 Freeport, IL 61032
 Jeff Ogden

Work Order: CUG0939

 Received: 07/18/11
 Reported: 08/08/11 09:37

Project: Sauer Danfoss - Ames, Iowa
 Project Number: 10-500

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Dup Result	% REC	Dup Result	% REC	% REC Limits	RPD Limit	Q
Volatile Organic Compounds													
Acetone	11G0801			ug/L	N/A	10.0	<10.0						
1,1-Dichloroethane	11G0801			ug/L	N/A	1.00	<1.00						
1,2-Dichloroethane	11G0801			ug/L	N/A	1.00	<1.00						
1,1-Dichloroethene	11G0801			ug/L	N/A	2.00	<2.00						
cis-1,2-Dichloroethene	11G0801			ug/L	N/A	1.00	<1.00						
trans-1,2-Dichloroethene	11G0801			ug/L	N/A	1.00	<1.00						
Methylene Chloride	11G0801			ug/L	N/A	5.00	<5.00						
Tetrachloroethene	11G0801			ug/L	N/A	1.00	<1.00						
1,1,1-Trichloroethane	11G0801			ug/L	N/A	1.00	<1.00						
1,1,2-Trichloroethane	11G0801			ug/L	N/A	1.00	<1.00						
Trichloroethene	11G0801			ug/L	N/A	1.00	<1.00						C9
Vinyl chloride	11G0801			ug/L	N/A	1.00	<1.00						
Xylenes, total	11G0801			ug/L	N/A	3.00	<3.00						
Surrogate: Dibromoformmethane	11G0801			ug/L				97			75-120		
Surrogate: Toluene-d8	11G0801			ug/L				97			80-120		
Surrogate: 4-Bromofluorobenzene	11G0801			ug/L				100			75-110		Z6
Acetone	11G0844			ug/L	N/A	10.0	<10.0						
1,1-Dichloroethane	11G0844			ug/L	N/A	1.00	<1.00						
1,2-Dichloroethane	11G0844			ug/L	N/A	1.00	<1.00						
1,1-Dichloroethene	11G0844			ug/L	N/A	2.00	<2.00						
cis-1,2-Dichloroethene	11G0844			ug/L	N/A	1.00	<1.00						
trans-1,2-Dichloroethene	11G0844			ug/L	N/A	1.00	<1.00						
Methylene Chloride	11G0844			ug/L	N/A	5.00	<5.00						
Tetrachloroethene	11G0844			ug/L	N/A	1.00	<1.00						
1,1,1-Trichloroethane	11G0844			ug/L	N/A	1.00	<1.00						
1,1,2-Trichloroethane	11G0844			ug/L	N/A	1.00	<1.00						
Trichloroethene	11G0844			ug/L	N/A	1.00	<1.00						
Vinyl chloride	11G0844			ug/L	N/A	1.00	<1.00						
Xylenes, total	11G0844			ug/L	N/A	3.00	<3.00						
Surrogate: Dibromoformmethane	11G0844			ug/L				96			75-120		
Surrogate: Toluene-d8	11G0844			ug/L				96			80-120		
Surrogate: 4-Bromofluorobenzene	11G0844			ug/L				100			75-110		
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)													
1,4-Dioxane	11G2849			ug/l	N/A	6.0	<6.0						
Surrogate: Dibromoformmethane	11G2849			ug/l				100			80-120		
1,4-Dioxane	11G2862			ug/l	N/A	6.0	<6.0						
Surrogate: Dibromoformmethane	11G2862			ug/l				102			80-120		

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FEHR-GRAHAM & ASSOCIATES - FREEPORT
221 E. Main Street, Ste. 200
Freeport, IL 61032
Jeff Ogden

Work Order: CUG0939

Received: 07/18/11
Reported: 08/08/11 09:37

Project: Sauer Danfoss - Ames, Iowa
Project Number: 10-500

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	%REC Limits	RPD	RPD Limit	Q
Volatile Organic Compounds														
Acetone	11G0801	20.0	ug/L	N/A	N/A	22.9		115			60-135			
1,1-Dichloroethane	11G0801	20.0	ug/L	N/A	N/A	17.6		88			70-130			
1,2-Dichloroethane	11G0801	20.0	ug/L	N/A	N/A	20.1		101			65-135			
1,1-Dichloroethene	11G0801	20.0	ug/L	N/A	N/A	15.2		76			70-135			
cis-1,2-Dichloroethene	11G0801	20.0	ug/L	N/A	N/A	18.0		90			70-130			
trans-1,2-Dichloroethene	11G0801	20.0	ug/L	N/A	N/A	16.0		80			70-130			
Methylene Chloride	11G0801	20.0	ug/L	N/A	N/A	20.8		104			70-135			
Tetrachloroethene	11G0801	20.0	ug/L	N/A	N/A	21.0		105			70-130			
1,1,1-Trichloroethane	11G0801	20.0	ug/L	N/A	N/A	19.7		98			60-125			
1,1,2-Trichloroethane	11G0801	20.0	ug/L	N/A	N/A	21.8		109			75-125			
Trichloroethene	11G0801	20.0	ug/L	N/A	N/A	17.2		86			70-130			
Vinyl chloride	11G0801	20.0	ug/L	N/A	N/A	18.9		95			60-135			C9
Xylenes, total	11G0801	60.0	ug/L	N/A	N/A	56.6		94			70-130			
Surrogate: Dibromoformmethane	11G0801		ug/L					99			75-120			
Surrogate: Toluene-d8	11G0801		ug/L					112			80-120			
Surrogate: 4-Bromofluorobenzene	11G0801		ug/L					122			80-120			Z6
Acetone	11G0844	20.0	ug/L	N/A	N/A	24.4		122			60-150			
1,1-Dichloroethane	11G0844	20.0	ug/L	N/A	N/A	19.5		98			60-130			
1,2-Dichloroethane	11G0844	20.0	ug/L	N/A	N/A	18.5		93			65-140			
1,1-Dichloroethene	11G0844	20.0	ug/L	N/A	N/A	18.5		93			60-135			
cis-1,2-Dichloroethene	11G0844	20.0	ug/L	N/A	N/A	21.4		107			70-135			
trans-1,2-Dichloroethene	11G0844	20.0	ug/L	N/A	N/A	20.2		101			60-145			
Methylene Chloride	11G0844	20.0	ug/L	N/A	N/A	18.6		93			55-145			
Tetrachloroethene	11G0844	20.0	ug/L	N/A	N/A	21.3		106			70-135			
1,1,1-Trichloroethane	11G0844	20.0	ug/L	N/A	N/A	19.4		97			60-125			
1,1,2-Trichloroethane	11G0844	20.0	ug/L	N/A	N/A	20.2		101			75-125			
Trichloroethene	11G0844	20.0	ug/L	N/A	N/A	19.9		100			70-130			
Vinyl chloride	11G0844	20.0	ug/L	N/A	N/A	21.5		107			45-135			
Xylenes, total	11G0844	60.0	ug/L	N/A	N/A	63.7		106			70-130			
Surrogate: Dibromoformmethane	11G0844		ug/L					98			75-120			
Surrogate: Toluene-d8	11G0844		ug/L					100			80-120			
Surrogate: 4-Bromofluorobenzene	11G0844		ug/L					105			80-120			
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)														
1,4-Dioxane	11G2849	10.0	ug/l	N/A	6.0	11.1	9.34	111	93	70-125	17	30		
Surrogate: Dibromoformmethane	11G2849		ug/l					96	96	80-120				
1,4-Dioxane	11G2862	10.0	ug/l	N/A	6.0	9.27	9.79	93	98	70-125	5	30		
Surrogate: Dibromoformmethane	11G2862		ug/l					102	101	80-120				

FEHR-GRAHAM & ASSOCIATES - FREEPORT
 221 E. Main Street, Ste. 200
 Freeport, IL 61032
 Jeff Ogden

Work Order: CUG0939

 Received: 07/18/11
 Reported: 08/08/11 09:37

Project: Sauer Danfoss - Ames, Iowa
 Project Number: 10-500

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Dup Result	% REC	Dup Result	% REC	% REC Limits	RPD	RPD Limit	Q
Volatile Organic Compounds														
QC Source Sample: CUG0939-01														
Acetone	11G0801	0.350	20.0	ug/L	N/A	N/A	17.9	17.7	88	87	45-115	1	30	
1,1-Dichloroethane	11G0801	<1.00	20.0	ug/L	N/A	N/A	19.2	17.3	96	86	60-130	11	15	
1,2-Dichloroethane	11G0801	<1.00	20.0	ug/L	N/A	N/A	20.5	19.7	103	98	55-135	4	10	
1,1-Dichloroethene	11G0801	<2.00	20.0	ug/L	N/A	N/A	16.8	14.4	84	72	45-135	16	20	
cis-1,2-Dichloroethene	11G0801	<1.00	20.0	ug/L	N/A	N/A	18.9	18.0	95	90	45-135	5	20	
trans-1,2-Dichloroethene	11G0801	<1.00	20.0	ug/L	N/A	N/A	18.1	16.5	91	83	50-135	9	15	
Methylene Chloride	11G0801	0.0400	20.0	ug/L	N/A	N/A	20.5	19.6	102	98	60-140	4	15	
Tetrachloroethene	11G0801	<1.00	20.0	ug/L	N/A	N/A	20.6	22.6	103	113	50-135	9	20	
1,1,1-Trichloroethane	11G0801	0.0300	20.0	ug/L	N/A	N/A	21.8	19.8	109	99	40-125	9	10	
1,1,2-Trichloroethane	11G0801	<1.00	20.0	ug/L	N/A	N/A	20.5	23.8	102	119	60-130	15	15	
Trichloroethene	11G0801	<1.00	20.0	ug/L	N/A	N/A	19.7	18.1	99	90	50-130	9	20	
Vinyl chloride	11G0801	<1.00	20.0	ug/L	N/A	N/A	22.3	19.7	111	98	40-135	12	15	C9
Xylenes, total	11G0801	<3.00	60.0	ug/L	N/A	N/A	53.8	43.1	90	72	40-125	22	20	R
Surrogate: Dibromoformmethane	11G0801			ug/L					100	97	75-120			
Surrogate: Toluene-d8	11G0801			ug/L					88	118	80-120			
Surrogate: 4-Bromofluorobenzene	11G0801			ug/L					96	108	80-120			
QC Source Sample: CUG1012-03														
Acetone	11G0844	2.91	20.0	ug/L	N/A	N/A	19.1	19.6	81	83	45-150	3	35	
1,1-Dichloroethane	11G0844	<1.00	20.0	ug/L	N/A	N/A	17.4	17.4	87	87	50-130	0	25	
1,2-Dichloroethane	11G0844	<1.00	20.0	ug/L	N/A	N/A	16.4	16.8	82	84	55-140	2	15	
1,1-Dichloroethene	11G0844	<2.00	20.0	ug/L	N/A	N/A	16.7	16.3	84	82	35-135	2	30	
cis-1,2-Dichloroethene	11G0844	0.0100	20.0	ug/L	N/A	N/A	18.9	18.8	95	94	45-135	1	20	
trans-1,2-Dichloroethene	11G0844	<1.00	20.0	ug/L	N/A	N/A	17.2	17.5	86	88	45-145	1	35	
Methylene Chloride	11G0844	0.670	20.0	ug/L	N/A	N/A	17.9	18.5	86	89	45-145	3	30	
Tetrachloroethene	11G0844	0.140	20.0	ug/L	N/A	N/A	18.2	19.4	90	96	40-135	6	20	
1,1,1-Trichloroethane	11G0844	<1.00	20.0	ug/L	N/A	N/A	17.0	18.1	85	90	40-125	6	20	
1,1,2-Trichloroethane	11G0844	<1.00	20.0	ug/L	N/A	N/A	19.2	20.0	96	100	60-130	4	15	
Trichloroethene	11G0844	<1.00	20.0	ug/L	N/A	N/A	17.0	18.2	85	91	50-130	7	20	
Vinyl chloride	11G0844	<1.00	20.0	ug/L	N/A	N/A	18.8	19.2	94	96	30-135	2	20	
Xylenes, total	11G0844	<3.00	60.0	ug/L	N/A	N/A	55.8	59.5	93	99	40-135	6	20	
Surrogate: Dibromoformmethane	11G0844			ug/L					101	97	75-120			
Surrogate: Toluene-d8	11G0844			ug/L					96	100	80-120			
Surrogate: 4-Bromofluorobenzene	11G0844			ug/L					102	105	80-120			
1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)														
QC Source Sample: CUG0939-01														
1,4-Dioxane	11G2849	<6.0	10.0	ug/l	N/A	6.0	10.2	9.35	102	94	70-130	9	30	
Surrogate: Dibromoformmethane	11G2849			ug/l					102	102	80-120			
QC Source Sample: IUG1155-04														
1,4-Dioxane	11G2862	3.74	10.0	ug/l	N/A	6.0	13.0	14.2	92	104	70-130	9	30	
Surrogate: Dibromoformmethane	11G2862			ug/l					104	102	80-120			

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FEHR-GRAHAM & ASSOCIATES - FREEPORT
221 E. Main Street, Ste. 200
Freeport, IL 61032
Jeff Ogden

Work Order: CUG0939
Project: Sauer Danfoss - Ames, Iowa
Project Number: 10-500

Received: 07/18/11
Reported: 08/08/11 09:37

CERTIFICATION SUMMARY

TestAmerica Cedar Falls

Method	Matrix	Nelac	Iowa
SW 8260B	Water - NonPotable	X	X
SW	Water - NonPotable		

Subcontracted Laboratories

TestAmerica Irvine
17461 Derian Avenue, Suite 100 - Irvine, CA 92614

Method Performed: EPA 8260B-SIM
Samples: CUG0939-01, CUG0939-02, CUG0939-03, CUG0939-04, CUG0939-05

Any abnormalities or departures from sample acceptance policy shall be documented on the 'Sample Receipt and Temperature Log Form' and 'Sample Non-conformance Form' (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility, please visit our website at www.TestAmericaInc.com

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC) and are sampled in accordance with TA-CF SOP CF-FSS-01.

DATA QUALIFIERS AND DEFINITIONS

- C9 Calibration Verification recovery was outside the method control limits for this analyte. The LCS for this analyte met CCV acceptance criteria, and was used to validate the batch.
R Sample duplicate RPD exceeded the laboratory control limit.
Z6 Surrogate recovery was outside control limits.

ADDITIONAL COMMENTS



FEHR-GRAHAM & ASSOCIATES
Engineering and Science Consultants

Chain of Custody Record

Project Number:	10-500
Turnaround Time (circle one):	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush
For Rush Delivery, Specify Due Date:	
Delivery Method: (circle one)	<input type="checkbox"/> Mail <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email

Deliver Report To:
(check one)

221 East Main Street
Suite 200
Freeport, IL 61032
815-235-7643 phone
815-235-4632 fax
aschlosser@fehr-graham.com e-mail

1920 Daimler Road
Rockford, IL 61112
815-394-4700 phone
815-394-4702 fax
bpaluzzi@fehr-graham.com e-mail

Internal Routing To:
Erin Jarrett
Jeff Oden

LAB USE ONLY

Login ID # _____
Login By _____
Lab Proj ID # _____
Sample Temperature _____
Received on ice Y or N
Cooler Sealed Y or N
Comments:

Page 1 of 1
Retain Samples
Y N

Sampled By: J. Oden

ANALYSIS REQUESTED (Specify Method if applicable)

Sec VOC list below	1,4-Dioxane				

SAMPLE IDENTIFICATION	DATE SAMPLED	TIME OF COLLECTION	COMP	GRAB	HCl	NaOH	HNO3	H2SO4	NONE	OTHER	SAMPLE DESCRIPTION	GW	X	X				
29433-MW-33	07/17/11	16:47		X	6													
29434-MW-33 MS																		
29435-MW-33 MSD		↓																
29436-MW-5		19:57																
29437-MW-R65		21:24																
29438-DWP		—		↓														
29439-Equip Blank	↓	22:03		↓							AQ	↓	↓					
29440-Trip Blank	—	—		↓								↓	↓					

VOC list: Acetone, 1,1-DCA, 1,2-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, Methylbenzene, Chloroethane, ACE, 1,1,1-TCA, 1,1,2-TCA, TCE, VC, Xylenes (total)
 Relinquished By: J. Oden Date: 07/18/11 Time: 15:55 Received By: J. Oden Date: 7-18-11 Time: 15:55
 Relinquished By: J. Oden Date: Time: Received By: Date: Time:
 Relinquished By: J. Oden Date: Time: Received By: Date: Time:

TestAmerica

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THE LEADER IN ENVIRONMENTAL TESTING

Sample Receipt and Temperature Log Form

Client: Fehr Graham and Associates Project: _____

City: Freeport, IL

Date: 7/18/11 Receiver's Initials: JMH Time (Delivered): 1000

Temperature Record:

Cooler ID# (If Applicable)

STL Green/Blue

5.5 °C / On Ice

Thermometer:

- IR - 111531565 'D'
- IR - 111531506 'E'
- IR - 61854108 'Front'
- 101681126

Courier:

- UPS
- TA Courier
- FedEx
- TA Field Services
- FedEx Ground
- Client
- US Postal Service
- Other
- Spee-Dee

Temp Blank used MW-5 HCl pres. vial

Temperature out of compliance

Custody seals present?

Yes

Custody seals intact?

Yes No

Non-Conformance report started

Exceptions Noted

- Sample(s) not received in a cooler.
- Samples(s) received same day of sampling.
- Evidence of a chilling process
- No Temp. Blank. Inside temperature of cooler recorded.
- Temperature not taken:
thermo. 221216775

*Refer to SOP CF-SS-01 for Temperature Criteria



Sauer Danfoss – Ames Iowa
TA Work Order #CUG0939

Case Narrative

TestAmerica – Cedar Falls received 6 samples on July 18, 2011 on ice and within temperature requirements. Requested analysis were for 8260 Volatiles and 1,4-Dioxane by 8260 SIM.

Sample ID		Date	
Field	Lab ID	Collected	Received
29433 MW-33	CUG0939-01	07/17/11 1647	07/18/11
29436 MW-5	CUG0939-02	07/17/11 1957	07/18/11
29437 MW-R65	CUG0939-03	07/17/11 2124	07/18/11
29438 DUP	CUG0939-04	07/17/11 0000	07/18/11
29439 Equip Blank	CUG0939-05	07/17/11 2203	07/18/11
29440 Trip Blank	CUG0939-06	07/17/11	07/18/11

8260 Volatiles (Batch #11G0801)

Method Blank – No detections of target compounds. 4-Bromofluorobenzene surrogate recovery was above method control limits. No impact on data quality.

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – The relative percent difference (RPD) was outside of control limits for Total Xylenes. Recoveries for the MS and MSD were within laboratory control limits. No impact on data quality.

Sample surrogates – No deviations

Sample Dilutions – No deviations

Clarification of Data Qualifier:

C9: The continuing calibration verification (CCV) standard recovery for Vinyl Chloride (131%) was above laboratory control limits. There were no sample detections for this compound. Data not impacted.

8260 Volatiles (Batch #11G0844)

Method Blank – No deviations



Laboratory Control Sample (LCS) – No deviations
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations
Sample surrogates – No deviations
Sample Dilutions – No deviations
Clarification of Data Qualifier: None

8260 1,4-Dioxane (Batch#11G2849)

Method Blank – No deviations
Laboratory Control Sample (LCS) – No deviations
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations
Sample surrogates – No deviations
Sample Dilutions – No deviations

8260 1,4-Dioxane (Batch#11G2862)

Method Blank – No deviations
Laboratory Control Sample (LCS) – No deviations
Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations
Sample surrogates – No deviations
Sample Dilutions – No deviations

There is not data quality issues associated with samples analyzed under this work order.

ATTACHMENT 4

Laboratory Report for October 18, 2011 Additional Sampling Event

1

2

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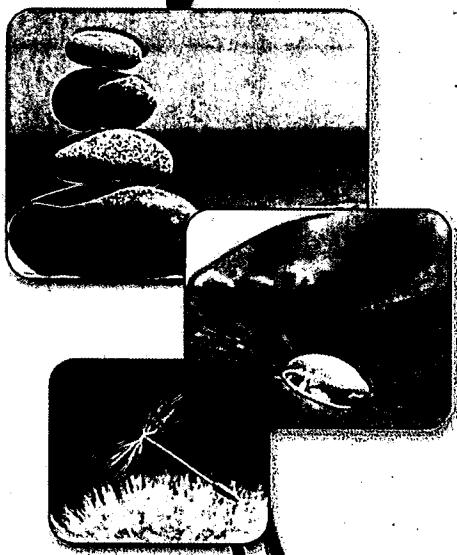
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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Cedar Falls

704 Enterprise Drive

Cedar Falls, IA 50613

Tel: 800-750-2401

TestAmerica Job ID: CUJ1220

Client Project/Site: 10-500

Client Project Description: Sauer Danfoss - Ames, Iowa

For:

FEHR-GRAHAM & ASSOCIATES - FREEPORT

221 E. Main Street, Ste. 200

Freeport, IL 61032

Attn: Joel Zirkle

Authorized for release by:

11/8/2011 10:44:11 AM

Derrick Klinkenberg

Organics Manager

derrick.klinkenberg@testamericainc.com

LINKS

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results through

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Ask
The
Expert

Visit us at:

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
CUJ1220-01	29721 MW-10	Ground Water	10/18/11 15:19	10/19/11 14:07
CUJ1220-02	29722 MWR-13	Ground Water	10/18/11 14:32	10/19/11 14:07
CUJ1220-03	29723 MWR-14	Ground Water	10/18/11 16:07	10/19/11 14:07

Detection Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Client Sample ID: 29721 MW-10

Lab Sample ID: CUJ1220-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	16.9		5.00		ug/L	5.00		SW 8260B	Total
1,1-Dichloroethene	45.2		10.0		ug/L	5.00		SW 8260B	Total
cis-1,2-Dichloroethene	20.0		5.00		ug/L	5.00		SW 8260B	Total
Tetrachloroethene	580		5.00		ug/L	5.00		SW 8260B	Total
1,1,1-Trichloroethane	294		5.00		ug/L	5.00		SW 8260B	Total
Trichloroethene	18.4		5.00		ug/L	5.00		SW 8260B	Total
1,4-Dioxane	14		6.0		ug/L	1.0		EPA 8260B-SIM	Total
Sulfate	30.8		2.00		mg/L	2.00		SW 9056	Total

Client Sample ID: 29722 MWR-13

Lab Sample ID: CUJ1220-02

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2140		50.0		ug/L	50.0		SW 8260B	Total
1,1-Dichloroethene	328		100		ug/L	50.0		SW 8260B	Total
Tetrachloroethene	5990		50.0		ug/L	50.0		SW 8260B	Total
1,1,1-Trichloroethane	4000		50.0		ug/L	50.0		SW 8260B	Total
1,1,2-Trichloroethane	144		50.0		ug/L	50.0		SW 8260B	Total
Sulfate	6960		200		mg/L	200		SW 9056	Total

Client Sample ID: 29723 MWR-14

Lab Sample ID: CUJ1220-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	11.9		1.00		ug/L	1.00		SW 8260B	Total
1,1-Dichloroethene	20.9		2.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	234		1.00		ug/L	1.00		SW 8260B	Total
1,1,1-Trichloroethane	86.8		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	1.24		1.00		ug/L	1.00		SW 8260B	Total
Sulfate	44.6		2.00		mg/L	2.00		SW 9056	Total

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Client Sample ID: 29721 MW-10

Lab Sample ID: CUJ1220-01

Date Collected: 10/18/11 15:19
 Date Received: 10/19/11 14:07

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<50.0	CIN	50.0		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
1,1-Dichloroethane	16.9		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
1,2-Dichloroethane	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
1,1-Dichloroethene	45.2		10.0		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
cis-1,2-Dichloroethene	20.0		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
trans-1,2-Dichloroethene	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
Methylene Chloride	<25.0		25.0		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
Tetrachloroethene	580		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
1,1,1-Trichloroethane	294		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
1,1,2-Trichloroethane	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
Trichloroethene	18.4		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
Vinyl chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
Xylenes, total	<15.0		15.0		ug/L		10/26/11 00:00	10/26/11 13:12	5.00
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	96		75 - 120				10/26/11 00:00	10/26/11 13:12	5.00
Toluene-d8	97		80 - 120				10/26/11 00:00	10/26/11 13:12	5.00
4-Bromofluorobenzene	98		75 - 110				10/26/11 00:00	10/26/11 13:12	5.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/25/11 16:37	10/25/11 16:42	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	14		6.0		ug/l		10/30/11 19:49	10/31/11 03:16	1.0
Surrogate									
Dibromofluoromethane	101		80 - 120				10/30/11 19:49	10/31/11 03:16	1.0

Method: SW 9056 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	30.8		2.00		mg/L		10/24/11 11:55	10/24/11 11:55	2.00

Client Sample ID: 29722 MWR-13

Lab Sample ID: CUJ1220-02

Date Collected: 10/18/11 14:32

Matrix: Ground Water

Date Received: 10/19/11 14:07

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<500	CIN	500		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
1,1-Dichloroethane	2140		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
1,2-Dichloroethane	<50.0		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
1,1-Dichloroethene	328		100		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
cis-1,2-Dichloroethene	<50.0		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
trans-1,2-Dichloroethene	<50.0		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
Methylene Chloride	<250		250		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
Tetrachloroethene	5990		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
1,1,1-Trichloroethane	4000		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
1,1,2-Trichloroethane	144		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Client Sample ID: 29722 MWR-13

Date Collected: 10/18/11 14:32
Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1220-02

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<50.0		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
Vinyl chloride	<50.0		50.0		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
Xylenes, total	<150		150		ug/L		10/26/11 00:00	10/26/11 13:57	50.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	100		75 - 120				10/26/11 00:00	10/26/11 13:57	50.0
Toluene-d8	98		80 - 120				10/26/11 00:00	10/26/11 13:57	50.0
4-Bromofluorobenzene	101		75 - 110				10/26/11 00:00	10/26/11 13:57	50.0

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/25/11 16:37	10/25/11 16:42	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<120	RL1	120		ug/l		10/30/11 19:49	10/31/11 03:46	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	113	RL1	80 - 120				10/30/11 19:49	10/31/11 03:46	20

Method: SW 9056 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	6960		200		mg/L		10/24/11 11:55	10/24/11 11:55	200

Client Sample ID: 29723 MWR-14

Date Collected: 10/18/11 16:07
Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1220-03

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
1,1-Dichloroethane	11.9		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
1,1-Dichloroethene	20.9		2.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
Tetrachloroethene	234		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
1,1,1-Trichloroethane	86.8		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
Trichloroethene	1.24		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 10:58	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98		75 - 120				10/26/11 00:00	10/26/11 10:58	1.00
Toluene-d8	95		80 - 120				10/26/11 00:00	10/26/11 10:58	1.00
4-Bromofluorobenzene	99		75 - 110				10/26/11 00:00	10/26/11 10:58	1.00

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Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Client Sample ID: 29723 MWR-14

Lab Sample ID: CUJ1220-03

Date Collected: 10/18/11 16:07

Matrix: Ground Water

Date Received: 10/19/11 14:07

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units	D	10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l	D	10/30/11 19:49	10/31/11 04:16	1.0

Surrogate %Recovery Qualifier Limits

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	113		80 - 120	10/30/11 19:49	10/31/11 04:16	1.0

Method: SW 9056 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	44.6		2.00		mg/L	D	10/24/11 11:55	10/24/11 11:55	2.00

Surrogate Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT

TestAmerica Job ID: CUJ1220

Project/Site: 10-500

Method: SW 8260B - Volatile Organic Compounds

Matrix: Ground Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (75-110)
CUJ1220-01	29721 MW-10	96	97	98
CUJ1220-02	29722 MWR-13	100	98	101
CUJ1220-03	29723 MWR-14	98	95	99

Surrogate Legend

DBFM = Dibromofluoromethane
TOL = Toluene-d8
BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (75-110)
11J1424-BLK1	Method Blank	99	98	102

Surrogate Legend

DBFM = Dibromofluoromethane
TOL = Toluene-d8
BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (80-120)
11J1424-BS1	Lab Control Sample	102	97	100
11J1424-MS1	Matrix Spike	101	97	99
11J1424-MSD1	Matrix Spike Duplicate	101	97	100

Surrogate Legend

DBFM = Dibromofluoromethane
TOL = Toluene-d8
BFB = 4-Bromofluorobenzene

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Matrix: Ground Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (80-120)		
CUJ1220-01	29721 MW-10	101		
CUJ1220-02	29722 MWR-13	113 RL1		
CUJ1220-03	29723 MWR-14	113		

Surrogate Legend

DBFM = Dibromofluoromethane

Surrogate Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Matrix: Water

Prep Type: Total

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBFM (80-120)
11J3912-BLK1	Method Blank	108
11J3912-BS1	Lab Control Sample	104
11J3912-MS1	Matrix Spike	105
11J3912-MSD1	Matrix Spike Duplicate	102

Surrogate Legend

DBFM = Dibromofluoromethane

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Method: SW 8260B - Volatile Organic Compounds

Lab Sample ID: 11J1424-BLK1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Analyte	Blank	Blank	Client Sample ID: Method Blank							
	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Tetrachloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Surrogate	Blank	Blank								
	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		75 - 120					10/26/11 00:00	10/26/11 06:07	1.00
Toluene-d8	98		80 - 120					10/26/11 00:00	10/26/11 06:07	1.00
4-Bromofluorobenzene	102		75 - 110					10/26/11 00:00	10/26/11 06:07	1.00

Lab Sample ID: 11J1424-BS1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Analyte	Spike	LCS	LCS	Client Sample ID: Lab Control Sample					Prep Type: Total
	Added	Result	Qualifier	Unit	D	%Rec	Limits	Prep Batch: 11J1424_P	
Acetone	20.0	24.5	CIN	ug/L		122	60 - 150		
1,1-Dichloroethane	20.0	21.1		ug/L		105	60 - 130		
1,2-Dichloroethane	20.0	20.4		ug/L		102	65 - 140		
1,1-Dichloroethene	20.0	21.9		ug/L		109	60 - 135		
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	70 - 135		
trans-1,2-Dichloroethene	20.0	21.8		ug/L		109	60 - 145		
Methylene Chloride	20.0	20.2		ug/L		101	55 - 145		
Tetrachloroethene	20.0	22.7		ug/L		113	70 - 135		
1,1,1-Trichloroethane	20.0	23.2		ug/L		116	60 - 125		
1,1,2-Trichloroethane	20.0	20.5		ug/L		102	75 - 125		
Trichloroethene	20.0	21.3		ug/L		107	70 - 130		
Vinyl chloride	20.0	21.0		ug/L		105	45 - 135		
Xylenes, total	60.0	65.1		ug/L		108	70 - 130		
Surrogate	LCS	LCS							
	%Recovery	Qualifier	Limits					%Rec.	
Dibromofluoromethane	102		75 - 120						
Toluene-d8	97		80 - 120						
4-Bromofluorobenzene	100		80 - 120						

Lab Sample ID: 11J1424-MS1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Client Sample ID: Matrix Spike				
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	Prep Batch: 11J1424_P
Acetone	0.520		20.0	15.4	CIN	ug/L		74	45 - 150	%Rec.

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QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 11J1424-MS1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11J1424_P

%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethane	<0.210		20.0	17.4		ug/L	87	50 - 130	
1,2-Dichloroethane	<0.180		20.0	17.9		ug/L	89	55 - 140	
1,1-Dichloroethene	<0.150		20.0	16.9		ug/L	84	35 - 135	
cis-1,2-Dichloroethene	<0.130		20.0	18.9		ug/L	94	45 - 135	
trans-1,2-Dichloroethene	<0.210		20.0	17.0		ug/L	85	45 - 145	
Methylene Chloride	0.200		20.0	17.5		ug/L	86	45 - 145	
Tetrachloroethene	3.55		20.0	19.2		ug/L	78	40 - 135	
1,1,1-Trichloroethane	0.0200		20.0	18.8		ug/L	94	40 - 125	
1,1,2-Trichloroethane	0.0300		20.0	17.4		ug/L	87	60 - 130	
Trichloroethene	<0.190		20.0	17.3		ug/L	86	50 - 130	
Vinyl chloride	<0.100		20.0	17.0		ug/L	85	30 - 135	
Xylenes, total	<0.130		60.0	49.7		ug/L	83	40 - 135	

Matrix Spike

Matrix Spike

%Recovery Qualifier Limits

Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane	101		75 - 120
Toluene-d8	97		80 - 120
4-Bromofluorobenzene	99		80 - 120

Lab Sample ID: 11J1424-MSD1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11J1424_P

%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Acetone	0.520		20.0	18.2	CIN	ug/L	89	45 - 150	17	35	
1,1-Dichloroethane	<0.210		20.0	17.0		ug/L	85	50 - 130	2	25	
1,2-Dichloroethane	<0.180		20.0	17.9		ug/L	90	55 - 140	0.3	15	
1,1-Dichloroethene	<0.150		20.0	16.7		ug/L	83	35 - 135	1	30	
cis-1,2-Dichloroethene	<0.130		20.0	17.8		ug/L	89	45 - 135	6	20	
trans-1,2-Dichloroethene	<0.210		20.0	16.6		ug/L	83	45 - 145	2	35	
Methylene Chloride	0.200		20.0	17.5		ug/L	86	45 - 145	0.06	30	
Tetrachloroethene	3.55		20.0	18.4		ug/L	74	40 - 135	4	20	
1,1,1-Trichloroethane	0.0200		20.0	17.8		ug/L	89	40 - 125	5	20	
1,1,2-Trichloroethane	0.0300		20.0	17.3		ug/L	86	60 - 130	0.5	15	
Trichloroethene	<0.190		20.0	16.5		ug/L	83	50 - 130	4	20	
Vinyl chloride	<0.100		20.0	15.5		ug/L	78	30 - 135	9	20	
Xylenes, total	<0.130		60.0	49.0		ug/L	82	40 - 135	1	20	

Matrix Spike Dup

Matrix Spike Dup

%Recovery Qualifier Limits

Surrogate	%Recovery	Qualifier	Limits
Dibromofluoromethane	101		75 - 120
Toluene-d8	97		80 - 120
4-Bromofluorobenzene	100		80 - 120

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Lab Sample ID: 11J3912-BLK1							Client Sample ID: Method Blank				
Matrix: Water							Prep Type: Total				
Analysis Batch: 11J3912							Prep Batch: 11J3912_P				
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
1,4-Dioxane	<6.0		6.0	ug/l			10/30/11 19:49	10/30/11 20:46	1.00		
Surrogate							Prepared				
Surrogate	%Recovery	Qualifier	Limits				10/30/11 19:49	10/30/11 20:46	1.00		
Dibromofluoromethane	108		80 - 120								
Lab Sample ID: 11J3912-BS1							Client Sample ID: Lab Control Sample				
Matrix: Water							Prep Type: Total				
Analysis Batch: 11J3912							Prep Batch: 11J3912_P				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits				
1,4-Dioxane	10.0	8.39	ug/l			84	70 - 125				
Surrogate							%Rec.				
Surrogate	%Recovery	Qualifier	Limits								
Dibromofluoromethane	104		80 - 120								
Lab Sample ID: 11J3912-MS1							Client Sample ID: Matrix Spike				
Matrix: Water							Prep Type: Total				
Analysis Batch: 11J3912							Prep Batch: 11J3912_P				
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec.	Limits		
1,4-Dioxane	<1.00		10.0	7.67	ug/l			77	70 - 130		
Surrogate							%Rec.				
Surrogate	%Recovery	Qualifier	Limits								
Dibromofluoromethane	105		80 - 120								
Lab Sample ID: 11J3912-MSD1							Client Sample ID: Matrix Spike Duplicate				
Matrix: Water							Prep Type: Total				
Analysis Batch: 11J3912							Prep Batch: 11J3912_P				
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec.	RPD		
1,4-Dioxane	<1.00		10.0	7.73	ug/l			77	70 - 130	0.8	30
Surrogate							%Rec.				
Surrogate	%Recovery	Qualifier	Limits								
Dibromofluoromethane	102		80 - 120								

Method: SW 9056 - General Chemistry Parameters

Lab Sample ID: 11J1256-BLK1							Client Sample ID: Method Blank				
Matrix: Water - NonPotable							Prep Type: Total				
Analysis Batch: 11J1256							Prep Batch: 11J1256_P				
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Sulfate	<1.00		1.00	mg/L			10/24/11 11:55	10/24/11 11:55	1.00		

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Method: SW 9056 - General Chemistry Parameters (Continued)

Lab Sample ID: 11J1256-BS1

Matrix: Water - NonPotable

Analysis Batch: 11J1256

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11J1256_P

Analyte

Sulfate

	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	10.0	10.0		mg/L	100	90 - 110	

Lab Sample ID: 11J1256-MS1

Matrix: Water - NonPotable

Analysis Batch: 11J1256

Client Sample ID: Matrix Spike

Prep Type: Total

Prep Batch: 11J1256_P

Analyte

Sulfate

	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec.	Limits
Sulfate	9.98		25.0	35.6		mg/L	103	80 - 120	

Lab Sample ID: 11J1256-MSD1

Matrix: Water - NonPotable

Analysis Batch: 11J1256

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total

Prep Batch: 11J1256_P

Analyte

Sulfate

	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec.	RPD	Limit
Sulfate	9.98		25.0	37.6		mg/L	110	80 - 120	5	15

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

GCMS Volatiles

Analysis Batch: 11J1305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1220-01	29721 MW-10	Total	Ground Water	SW	11J1305_P
CUJ1220-02	29722 MWR-13	Total	Ground Water	SW	11J1305_P

Analysis Batch: 11J1424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J1424-BLK1	Method Blank	Total	Water - NonPotable	SW 8260B	11J1424_P
11J1424-BS1	Lab Control Sample	Total	Water - NonPotable	SW 8260B	11J1424_P
11J1424-MS1	Matrix Spike	Total	Water - NonPotable	SW 8260B	11J1424_P
11J1424-MSD1	Matrix Spike Duplicate	Total	Water - NonPotable	SW 8260B	11J1424_P
CUJ1220-01	29721 MW-10	Total	Ground Water	SW 8260B	11J1424_P
CUJ1220-02	29722 MWR-13	Total	Ground Water	SW 8260B	11J1424_P
CUJ1220-03	29723 MWR-14	Total	Ground Water	SW 8260B	11J1424_P

Analysis Batch: 11J1446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1220-03	29723 MWR-14	Total	Ground Water	SW	11J1446_P

Prep Batch: 11J1305_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1220-01	29721 MW-10	Total	Ground Water	Default Prep	
CUJ1220-02	29722 MWR-13	Total	Ground Water	VOC	
				Default Prep	
				VOC	

Prep Batch: 11J1424_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J1424-BLK1	Method Blank	Total	Water - NonPotable	SW 5030B	
11J1424-BS1	Lab Control Sample	Total	Water - NonPotable	SW 5030B	
11J1424-MS1	Matrix Spike	Total	Water - NonPotable	SW 5030B	
11J1424-MSD1	Matrix Spike Duplicate	Total	Water - NonPotable	SW 5030B	
CUJ1220-01	29721 MW-10	Total	Ground Water	SW 5030B	
CUJ1220-02	29722 MWR-13	Total	Ground Water	SW 5030B	
CUJ1220-03	29723 MWR-14	Total	Ground Water	SW 5030B	

Prep Batch: 11J1446_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1220-03	29723 MWR-14	Total	Ground Water	Default Prep	
				VOC	

GCMS-Volatiles

Analysis Batch: 11J3912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J3912-BLK1	Method Blank	Total	Water	EPA 8260B-SIM	11J3912_P
11J3912-BS1	Lab Control Sample	Total	Water	EPA 8260B-SIM	11J3912_P
11J3912-MS1	Matrix Spike	Total	Water	EPA 8260B-SIM	11J3912_P
11J3912-MSD1	Matrix Spike Duplicate	Total	Water	EPA 8260B-SIM	11J3912_P

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

GCMS-Volatiles (Continued)

Analysis Batch: 11J3912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1220-01	29721 MW-10	Total	Ground Water	EPA 8260B-SIM	11J3912_P
CUJ1220-02	29722 MWR-13	Total	Ground Water	EPA 8260B-SIM	11J3912_P
CUJ1220-03	29723 MWR-14	Total	Ground Water	EPA 8260B-SIM	11J3912_P

Prep Batch: 11J3912_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J3912-BLK1	Method Blank	Total	Water	EPA 5030B	
11J3912-BS1	Lab Control Sample	Total	Water	GCMS	
11J3912-MS1	Matrix Spike	Total	Water	EPA 5030B	
11J3912-MSD1	Matrix Spike Duplicate	Total	Water	GCMS	
CUJ1220-01	29721 MW-10	Total	Ground Water	EPA 5030B	
CUJ1220-02	29722 MWR-13	Total	Ground Water	GCMS	
CUJ1220-03	29723 MWR-14	Total	Ground Water	EPA 5030B	
				GCMS	

WetChem

Analysis Batch: 11J1256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J1256-BLK1	Method Blank	Total	Water	SW 9056	11J1256_P
11J1256-BS1	Lab Control Sample	Total	NonPotable	SW 9056	11J1256_P
11J1256-MS1	Matrix Spike	Total	Water	SW 9056	11J1256_P
11J1256-MSD1	Matrix Spike Duplicate	Total	NonPotable	SW 9056	11J1256_P
CUJ1220-01	29721 MW-10	Total	Water	SW 9056	11J1256_P
CUJ1220-02	29722 MWR-13	Total	Ground Water	SW 9056	11J1256_P
CUJ1220-03	29723 MWR-14	Total	Ground Water	SW 9056	11J1256_P

Prep Batch: 11J1256_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J1256-BLK1	Method Blank	Total	Water	NO PREP - WET	
11J1256-BS1	Lab Control Sample	Total	NonPotable	CHEM	
11J1256-MS1	Matrix Spike	Total	Water	NO PREP - WET	
11J1256-MSD1	Matrix Spike Duplicate	Total	NonPotable	CHEM	
CUJ1220-01	29721 MW-10	Total	Water	NO PREP - WET	
CUJ1220-02	29722 MWR-13	Total	Ground Water	CHEM	
CUJ1220-03	29723 MWR-14	Total	Ground Water	NO PREP - WET	
				CHEM	

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Client Sample ID: 29721 MW-10

Date Collected: 10/18/11 15:19

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1220-01

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		5.00	11J1424	10/26/11 13:12	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1305_P	10/25/11 16:37	EEE	TAL CF
Total	Analysis	SW		1.00	11J1305	10/25/11 16:42	EEE	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3912_P	10/30/11 19:49	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3912	10/31/11 03:16	GMK	TAL IRV
Total	Analysis	SW 9056		2.00	11J1256	10/24/11 11:55	TLR	TAL CF
Total	Prep	NO PREP - WET CHEM		1.00	11J1256_P	10/24/11 11:55	TLR	TAL CF

Client Sample ID: 29722 MWR-13

Date Collected: 10/18/11 14:32

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1220-02

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		50.0	11J1424	10/26/11 13:57	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1305_P	10/25/11 16:37	EEE	TAL CF
Total	Analysis	SW		1.00	11J1305	10/25/11 16:42	EEE	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3912_P	10/30/11 19:49	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		20	11J3912	10/31/11 03:46	GMK	TAL IRV
Total	Analysis	SW 9056		200	11J1256	10/24/11 11:55	TLR	TAL CF
Total	Prep	NO PREP - WET CHEM		1.00	11J1256_P	10/24/11 11:55	TLR	TAL CF

Client Sample ID: 29723 MWR-14

Date Collected: 10/18/11 16:07

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1220-03

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 10:58	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3912_P	10/30/11 19:49	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3912	10/31/11 04:16	GMK	TAL IRV
Total	Analysis	SW 9056		2.00	11J1256	10/24/11 11:55	TLR	TAL CF
Total	Prep	NO PREP - WET CHEM		1.00	11J1256_P	10/24/11 11:55	TLR	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

Definitions/Glossary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
CIN	The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria specified in EPA methods 8260B/8270C.

GCMS-Volatiles

Qualifier	Qualifier Description
RL1	Reporting limit raised due to sample matrix effects.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Cedar Falls	AIHA - LAP	IHLAP		101044
TestAmerica Cedar Falls	Illinois	NELAC	5	200024
TestAmerica Cedar Falls	Iowa	State Program	7	7
TestAmerica Cedar Falls	Kansas	NELAC	7	E-10341
TestAmerica Cedar Falls	Minnesota	NELAC	5	019-999-319
TestAmerica Cedar Falls	North Dakota	State Program	8	R-186
TestAmerica Cedar Falls	Oregon	NELAC	10	IA100001
TestAmerica Cedar Falls	Wisconsin	State Program	5	999917270
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 10,001r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	USDA		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUJ1220

Method	Method Description	Protocol	Laboratory
SW	VOC Preservation Check		TAL CF
SW 8260B	Volatile Organic Compounds		TAL CF
EPA 8260B-SIM	1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)		TAL IRV
SW 9056	General Chemistry Parameters		TAL CF

Protocol References:

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sauer Danfoss – Ames Iowa
TA Work Order #CUJ1220

Case Narrative

TestAmerica – Cedar Falls received 3 samples on October 19, 2011 on ice and within temperature requirements. Requested analysis were for 8260 Volatiles and 1,4-Dioxane by 8260 SIM.

Sample ID		Date	
Field	Lab ID	Collected	Received
29721 MW-10	CUJ1220-01	10-18-11 15:19	10-19-11 14:07
29722 MWR-13	CUJ1220-02	10-18-11 14:32	10-19-11 14:07
29723 MWR-14	CUJ1220-03	10-18-11 16:07	10-19-11 14:07

8260 Volatiles (Batch #11J1424)

Method Blank – No deviations

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – No deviations

Sample Dilutions – Dilutions were performed on CUJ1220-01 and CUJ1220-02 due to target analyte concentrations.

Clarification of Data Qualifier:

CIN: The %RSD for Acetone (16.14%) was above laboratory control limits (15%). The average %RSD for all compounds in the calibration met the %15 criteria.

8260 1,4-Dioxane (Batch#11G2849)

Method Blank – No deviations

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – No deviations

Sample Dilutions – Dilutions were performed on CUJ1220-02 due to a matrix interferent.



THE LEADER IN ENVIRONMENTAL TESTING

There is no data quality issues associated with samples analyzed under this work order.

Page 2 of 2

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TestAmerica – Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613

(800) 740-2401 / (319) 277-2425 fax
11/8/2011

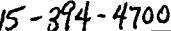


THE LEADER IN ENVIRONMENTAL TESTING

**Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613**

**Phone 319-277-2401 or 800-750-2401
Fax 319-277-2425**

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?

Client Name: Fehr - Graham Client #: _____
Address: 221 E. Main St.
City/State/Zip Code: Freeport, IL 61032
Project Manager: Joel Zinkle
Email Address: EJGarrett@fehr-graham.com
Telephone Number: 815-394-4700 Fax: 815-394-4702
Sampler Name: (Print Name) Mike Day
Sampler Signature:  Matrix Reservation # of Containers _____

Special Instructions: VOC's: Acetone, 1,1-DCA, 1,2-DCA, 1,2-DCE (cis + trans), 1,4-Dioxane, Methylene Chloride, PCE, 1,1,1-TCA, TCE, Vinyl Chloride, Xylenes (total)

Relinquished By:	<i>Mik</i>	Date: 10/19/11	Time: 8:00	Received By:	<i>J. L.</i>	Date: 10/19/11	Time: 14:00
Relinquished By:		Date:	Time:	Received By:		Date:	Time:
Relinquished By:		Date:	Time:	Received By:		Date:	Time:

TAL-0033 (0708)

TABLE 1
ANALYTE LIST

Acetone*
1,1-Dichloroethane*
1,2-Dichloroethane
1,1-Dichloroethene*
cis-1,2-Dichloroethene*
trans-1,2-Dichloroethene
1,4 Dioxane**
Methylene Chloride
Tetrachloroethene*
1,1,1-Trichloroethane*
1,1,2-Trichloroethane
Trichloroethene*
Vinyl Chloride***
Total Xylenes*

- * Required by Sauer-Danfoss's Permit No. 6593-3.
** Required for select monitoring wells.
*** Beginning second quarter 2002, as requested in the United States Environmental Protection Agency (US EPA) comments on the 2002 Annual Site Sampling Report.

Sample Receipt and Temperature Log Form

Client: Fehr - Graham & Assoc. Project: _____City: Freeport, FLDate: 10/19/11 Receiver's Initials: JL Time (Delivered): 2:07**Temperature Record:****Cooler ID# (If Applicable)**17115.8 °C / On Ice Temp Blank ~ none Temperature out of compliance**Thermometer:**

- IR - 111531565 'D'
- IR - 111531506 'E'
- IR - 61854108 'Front'
- 101681126

Courier:

- | | |
|--|--|
| <input type="checkbox"/> UPS | <input type="checkbox"/> TA Courier |
| <input type="checkbox"/> FedEx | <input type="checkbox"/> TA Field Services |
| <input type="checkbox"/> FedEx Ground | <input checked="" type="checkbox"/> Client |
| <input type="checkbox"/> US Postal Service | <input type="checkbox"/> Other |
| <input type="checkbox"/> Spee-Dee | |

Custody seals present?

 Yes

Custody seals intact?

 Yes No Non-Conformance report started**Exceptions Noted**

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Sample(s) not received in a cooler. |
| <input type="checkbox"/> | Samples(s) received same day of sampling. |
| <input type="checkbox"/> | Evidence of a chilling process |
| <input type="checkbox"/> | No Temp. Blank. Inside temperature of cooler recorded. |
| <input type="checkbox"/> | Temperature not taken: |

*Refer to SOP CF-SS-01 for Temperature Criteria

ATTACHMENT 5

Laboratory Report for October 19, 2011 Annual Sampling Event

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Cedar Falls

704 Enterprise Drive

Cedar Falls, IA 50613

Tel: 800-750-2401

TestAmerica Job ID: CUJ1221

Client Project/Site: 11-233

Client Project Description: Sauer Danfoss - Ames, Iowa

For:

FEHR-GRAHAM & ASSOCIATES - FREEPORT

221 E. Main Street, Ste. 200

Freeport, IL 61032

Attn: Joel Zirkle



Authorized for release by:

11/8/2011 11:02:44 AM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
CUJ1221-01	29724 MW-12	Ground Water	10/19/11 08:31	10/19/11 14:07
CUJ1221-02	29725 MW-18	Ground Water	10/19/11 09:06	10/19/11 14:07
CUJ1221-03	29726 MW-19	Ground Water	10/19/11 09:37	10/19/11 14:07
CUJ1221-04	29727 D01	Ground Water	10/19/11 00:00	10/19/11 14:07
CUJ1221-05	29728 MW-20	Ground Water	10/19/11 10:08	10/19/11 14:07
CUJ1221-06	29729 MWR-30	Ground Water	10/19/11 07:44	10/19/11 14:07
CUJ1221-07	29730 MW-31	Ground Water	10/19/11 11:17	10/19/11 14:07
CUJ1221-08	29731 MW-33	Ground Water	10/19/11 12:05	10/19/11 14:07
CUJ1221-09	29732 MW-34	Ground Water	10/19/11 10:43	10/19/11 14:07
CUJ1221-10	29734 EB-02	Ground Water	10/19/11 12:20	10/19/11 14:07
CUJ1221-11	29733 EB-01	Ground Water	10/18/11 16:27	10/19/11 14:07
CUJ1221-12	29735 TB01	Water	10/19/11 14:00	10/19/11 14:07

Detection Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29724 MW-12

Lab Sample ID: CUJ1221-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	7.03		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: 29725 MW-18

Lab Sample ID: CUJ1221-02

No Detections

Client Sample ID: 29726 MW-19

Lab Sample ID: CUJ1221-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.84		1.00		ug/L	1.00		SW 8260B	Total
1,1-Dichloroethene	4.19		2.00		ug/L	1.00		SW 8260B	Total
cis-1,2-Dichloroethene	3.09		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	50.5		1.00		ug/L	1.00		SW 8260B	Total
1,1,1-Trichloroethane	13.4		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	4.14		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: 29727 D01

Lab Sample ID: CUJ1221-04

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.38		1.00		ug/L	1.00		SW 8260B	Total
1,1-Dichloroethene	3.95		2.00		ug/L	1.00		SW 8260B	Total
cis-1,2-Dichloroethene	2.69		1.00		ug/L	1.00		SW 8260B	Total
Tetrachloroethene	49.9		1.00		ug/L	1.00		SW 8260B	Total
1,1,1-Trichloroethane	12.2		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	3.50		1.00		ug/L	1.00		SW 8260B	Total
1,4-Dioxane	7.0		6.0		ug/l	1.0		EPA 8260B-SIM	Total

Client Sample ID: 29728 MW-20

Lab Sample ID: CUJ1221-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	15.0		10.0		ug/L	10.0		SW 8260B	Total
cis-1,2-Dichloroethene	34.9		10.0		ug/L	10.0		SW 8260B	Total
Tetrachloroethene	452		10.0		ug/L	10.0		SW 8260B	Total
1,1,1-Trichloroethane	55.8		10.0		ug/L	10.0		SW 8260B	Total
Trichloroethene	16.4		10.0		ug/L	10.0		SW 8260B	Total
1,4-Dioxane	34		30		ug/l	5.0		EPA 8260B-SIM	Total

Client Sample ID: 29729 MWR-30

Lab Sample ID: CUJ1221-06

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	91.4		1.00		ug/L	1.00		SW 8260B	Total
Trichloroethene	3.04		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: 29730 MW-31

Lab Sample ID: CUJ1221-07

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	11.8		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: 29731 MW-33

Lab Sample ID: CUJ1221-08

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3.55		1.00		ug/L	1.00		SW 8260B	Total

Detection Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29732 MW-34

Lab Sample ID: CUJ1221-09

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	10.7		1.00		ug/L	1.00		SW 8260B	Total

Client Sample ID: 29734 EB-02

Lab Sample ID: CUJ1221-10

No Detections

Client Sample ID: 29733 EB-01

Lab Sample ID: CUJ1221-11

No Detections

Client Sample ID: 29735 TB01

Lab Sample ID: CUJ1221-12

No Detections

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29724 MW-12

Date Collected: 10/19/11 08:31

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-01

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
Tetrachloroethene	7.03		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 10:36	1.00

Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
Dibromofluoromethane	99		75 - 120		10/26/11 00:00	10/26/11 10:36	1.00
Toluene-d8	96		80 - 120		10/26/11 00:00	10/26/11 10:36	1.00
4-Bromofluorobenzene	101		75 - 110		10/26/11 00:00	10/26/11 10:36	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/30/11 01:22	1.0
Surrogate									
Dibromofluoromethane	114		80 - 120				10/29/11 17:38	10/30/11 01:22	1.0

Client Sample ID: 29725 MW-18

Date Collected: 10/19/11 09:06

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-02

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
Tetrachloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 10:14	1.00

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29725 MW-18

Lab Sample ID: CUJ1221-02

Date Collected: 10/19/11 09:06

Date Received: 10/19/11 14:07

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	96		75 - 120	10/26/11 00:00	10/26/11 10:14	1.00
Toluene-d8	98		80 - 120	10/26/11 00:00	10/26/11 10:14	1.00
4-Bromofluorobenzene	99		75 - 110	10/26/11 00:00	10/26/11 10:14	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/30/11 01:51	1.0
Surrogate									
Dibromofluoromethane									
	118			80 - 120			10/29/11 17:38	10/30/11 01:51	1.0

Client Sample ID: 29726 MW-19

Lab Sample ID: CUJ1221-03

Date Collected: 10/19/11 09:37

Date Received: 10/19/11 14:07

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
1,1-Dichloroethane	3.84		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
1,1-Dichloroethene	4.19		2.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
cis-1,2-Dichloroethene	3.09		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
Tetrachloroethene	50.5		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
1,1,1-Trichloroethane	13.4		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
Trichloroethene	4.14		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 09:51	1.00
Surrogate									
Dibromofluoromethane									
	98			75 - 120			10/26/11 00:00	10/26/11 09:51	1.00
Toluene-d8									
	97			80 - 120			10/26/11 00:00	10/26/11 09:51	1.00
4-Bromofluorobenzene									
	98			75 - 110			10/26/11 00:00	10/26/11 09:51	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<12		12		ug/l		10/30/11 19:34	10/30/11 22:20	2.0
Surrogate									
Dibromofluoromethane									
	113			80 - 120			10/30/11 19:34	10/30/11 22:20	2.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29727 D01

Date Collected: 10/19/11 00:00

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-04

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
1,1-Dichloroethane	3.38		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
1,1-Dichloroethene	3.95		2.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
cis-1,2-Dichloroethene	2.69		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
Tetrachloroethene	49.9		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
1,1,1-Trichloroethane	12.2		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
Trichloroethene	3.50		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 14:19	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	96		75 - 120				10/26/11 00:00	10/26/11 14:19	1.00
Toluene-d8	96		80 - 120				10/26/11 00:00	10/26/11 14:19	1.00
4-Bromofluorobenzene	97		75 - 110				10/26/11 00:00	10/26/11 14:19	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	7.0		6.0		ug/l		10/29/11 17:38	10/30/11 02:49	1.0
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	119		80 - 120				10/29/11 17:38	10/30/11 02:49	1.0

Client Sample ID: 29728 MW-20

Date Collected: 10/19/11 10:08

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-05

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<100	CIN	100		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
1,1-Dichloroethane	15.0		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
1,2-Dichloroethane	<10.0		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
1,1-Dichloroethene	<20.0		20.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
cis-1,2-Dichloroethene	34.9		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
trans-1,2-Dichloroethene	<10.0		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
Methylene Chloride	<50.0		50.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
Tetrachloroethene	452		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
1,1,1-Trichloroethane	55.8		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
1,1,2-Trichloroethane	<10.0		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
Trichloroethene	16.4		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
Vinyl chloride	<10.0		10.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0
Xylenes, total	<30.0		30.0		ug/L		10/26/11 00:00	10/26/11 13:35	10.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29728 MW-20

Lab Sample ID: CUJ1221-05

Date Collected: 10/19/11 10:08

Matrix: Ground Water

Date Received: 10/19/11 14:07

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	96		75 - 120	10/26/11 00:00	10/26/11 13:35	10.0
Toluene-d8	98		80 - 120	10/26/11 00:00	10/26/11 13:35	10.0
4-Bromofluorobenzene	99		75 - 110	10/26/11 00:00	10/26/11 13:35	10.0

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/25/11 16:37	10/25/11 16:42	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	34		30		ug/l		10/30/11 19:34	10/30/11 22:49	5.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	119		80 - 120				10/30/11 19:34	10/30/11 22:49	5.0

Client Sample ID: 29729 MWR-30

Lab Sample ID: CUJ1221-06

Date Collected: 10/19/11 07:44

Matrix: Ground Water

Date Received: 10/19/11 14:07

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
cis-1,2-Dichloroethene	91.4		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
Methylene Chloride	25.00		5.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
Tetrachloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
Trichloroethene	3.04		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 09:29	1.00

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98		75 - 120	10/26/11 00:00	10/26/11 09:29	1.00
Toluene-d8	97		80 - 120	10/26/11 00:00	10/26/11 09:29	1.00
4-Bromofluorobenzene	100		75 - 110	10/26/11 00:00	10/26/11 09:29	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29730 MW-31

Date Collected: 10/19/11 11:17

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-07

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
Tetrachloroethene	11.8		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 09:06	1.00
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98		75 - 120				10/26/11 00:00	10/26/11 09:06	1.00
Toluene-d8	97		80 - 120				10/26/11 00:00	10/26/11 09:06	1.00
4-Bromofluorobenzene	99		75 - 110				10/26/11 00:00	10/26/11 09:06	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Client Sample ID: 29731 MW-33

Lab Sample ID: CUJ1221-08

Matrix: Ground Water

Date Collected: 10/19/11 12:05

Date Received: 10/19/11 14:07

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
Tetrachloroethene	3.55		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 08:44	1.00
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		75 - 120				10/26/11 00:00	10/26/11 08:44	1.00
Toluene-d8	97		80 - 120				10/26/11 00:00	10/26/11 08:44	1.00
4-Bromofluorobenzene	101		75 - 110				10/26/11 00:00	10/26/11 08:44	1.00

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29731 MW-33

Date Collected: 10/19/11 12:05
Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-08
Matrix: Ground Water

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/29/11 21:58	1.0
Surrogate									
Dibromofluoromethane	113		80 - 120				10/29/11 17:38	10/29/11 21:58	1.0

Client Sample ID: 29732 MW-34

Date Collected: 10/19/11 10:43
Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-09

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
Tetrachloroethene	10.7		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 08:22	1.00
Surrogate									
Dibromofluoromethane	99		75 - 120				10/26/11 00:00	10/26/11 08:22	1.00
Toluene-d8	97		80 - 120				10/26/11 00:00	10/26/11 08:22	1.00
4-Bromofluorobenzene	99		75 - 110				10/26/11 00:00	10/26/11 08:22	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/30/11 03:47	1.0
Surrogate									
Dibromofluoromethane	117		80 - 120				10/29/11 17:38	10/30/11 03:47	1.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29734 EB-02

Date Collected: 10/19/11 12:20
Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-10
Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
Tetrachloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 07:59	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	96		75 - 120				10/26/11 00:00	10/26/11 07:59	1.00
Toluene-d8	97		80 - 120				10/26/11 00:00	10/26/11 07:59	1.00
4-Bromofluorobenzene	97		75 - 110				10/26/11 00:00	10/26/11 07:59	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-Dioxane BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/30/11 04:16	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	115		80 - 120				10/29/11 17:38	10/30/11 04:16	1.0

Client Sample ID: 29733 EB-01

Date Collected: 10/18/11 16:27
Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-11

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
Tetrachloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 07:37	1.00

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29733 EB-01

Lab Sample ID: CUJ1221-11

Date Collected: 10/18/11 16:27
Date Received: 10/19/11 14:07

Matrix: Ground Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	97		75 - 120	10/26/11 00:00	10/26/11 07:37	1.00
Toluene-d8	95		80 - 120	10/26/11 00:00	10/26/11 07:37	1.00
4-Bromofluorobenzene	99		75 - 110	10/26/11 00:00	10/26/11 07:37	1.00

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/30/11 04:45	1.0
Surrogate									
Dibromofluoromethane	107		80 - 120				Prepared	Analyzed	Dil Fac

Client Sample ID: 29735 TB01

Lab Sample ID: CUJ1221-12

Date Collected: 10/19/11 14:00

Matrix: Water

Date Received: 10/19/11 14:07

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	CIN	10.0		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
Methylene Chloride	<5.00		5.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
Tetrachloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
Trichloroethene	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
Vinyl chloride	<1.00		1.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
Xylenes, total	<3.00		3.00		ug/L		10/26/11 00:00	10/26/11 14:42	1.00
Surrogate									
Dibromofluoromethane	97		75 - 120				Prepared	Analyzed	Dil Fac

Method: SW - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		10/27/11 14:02	10/27/11 14:05	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		10/29/11 17:38	10/30/11 05:14	1.0
Surrogate									
Dibromofluoromethane	110		80 - 120				Prepared	Analyzed	Dil Fac

Surrogate Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method: SW 8260B - Volatile Organic Compounds

Matrix: Ground Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (75-110)
CUJ1221-01	29724 MW-12	99	96	101
CUJ1221-02	29725 MW-18	96	98	99
CUJ1221-03	29726 MW-19	98	97	98
CUJ1221-04	29727 D01	96	96	97
CUJ1221-05	29728 MW-20	96	98	99
CUJ1221-06	29729 MWR-30	98	97	100
CUJ1221-07	29730 MW-31	98	97	99
CUJ1221-08	29731 MW-33	99	97	101
CUJ1221-09	29732 MW-34	99	97	99
CUJ1221-10	29734 EB-02	96	97	97
CUJ1221-11	29733 EB-01	97	95	99

Surrogate Legend

DBFM = Dibromofluoromethane

TOL = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (75-110)
CUJ1221-12	29735 TB01	97	99	98

Surrogate Legend

DBFM = Dibromofluoromethane

TOL = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (75-110)
11J1424-BLK1	Method Blank	99	98	102

Surrogate Legend

DBFM = Dibromofluoromethane

TOL = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	TOL (80-120)	BFB (80-120)
11J1424-BS1	Lab Control Sample	102	97	100
11J1424-MS1	29731 MW-33	101	97	99
11J1424-MSD1	29731 MW-33	101	97	100

Surrogate Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Surrogate Legend

DBFM = Dibromofluoromethane

TOL = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Matrix: Ground Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DBFM	(80-120)
CUJ1221-01	29724 MW-12	114	
CUJ1221-02	29725 MW-18	118	
CUJ1221-03	29726 MW-19	113	
CUJ1221-04	29727 D01	119	
CUJ1221-05	29728 MW-20	119	
CUJ1221-08	29731 MW-33	113	
CUJ1221-09	29732 MW-34	117	
CUJ1221-10	29734 EB-02	115	
CUJ1221-11	29733 EB-01	107	

Surrogate Legend

DBFM = Dibromofluoromethane

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DBFM	(80-120)
11J3858-BLK1	Method Blank	106	
11J3858-BS1	Lab Control Sample	105	
11J3858-MS1	Matrix Spike	107	
11J3858-MS2	29731 MW-33	112	
11J3858-MSD1	Matrix Spike Duplicate	106	
11J3858-MSD2	29731 MW-33	110	
11J3910-BLK1	Method Blank	106	
11J3910-BS1	Lab Control Sample	105	
11J3910-BSD1	Lab Control Sample Dup.	104	
11J3910-MS1	Matrix Spike	106	
11J3910-MS2	Matrix Spike	108	
11J3910-MSD1	Matrix Spike Duplicate	106	
11J3910-MSD2	Matrix Spike Duplicate	107	
CUJ1221-12	29735 TB01	110	

Surrogate Legend

DBFM = Dibromofluoromethane

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method: SW 8260B - Volatile Organic Compounds

Lab Sample ID: 11J1424-BLK1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Analyte	Blank	Blank	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acetone	<10.0	CIN	10.0	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1-Dichloroethane	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,2-Dichloroethane	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1-Dichloroethene	<2.00		2.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
cis-1,2-Dichloroethene	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
trans-1,2-Dichloroethene	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Methylene Chloride	<5.00		5.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Tetrachloroethene	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1,1-Trichloroethane	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
1,1,2-Trichloroethane	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Trichloroethene	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Vinyl chloride	<1.00		1.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Xylenes, total	<3.00		3.00	ug/L		10/26/11 00:00	10/26/11 06:07	1.00	
Surrogate	Blank	Blank	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	99		75 - 120			10/26/11 00:00	10/26/11 06:07	1.00	
Toluene-d8	98		80 - 120			10/26/11 00:00	10/26/11 06:07	1.00	
4-Bromofluorobenzene	102		75 - 110			10/26/11 00:00	10/26/11 06:07	1.00	

Lab Sample ID: 11J1424-BS1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Acetone	20.0	24.5	CIN	ug/L	122	60 - 150	
1,1-Dichloroethane	20.0	21.1		ug/L	105	60 - 130	
1,2-Dichloroethane	20.0	20.4		ug/L	102	65 - 140	
1,1-Dichloroethene	20.0	21.9		ug/L	109	60 - 135	
cis-1,2-Dichloroethene	20.0	21.0		ug/L	105	70 - 135	
trans-1,2-Dichloroethene	20.0	21.8		ug/L	109	60 - 145	
Methylene Chloride	20.0	20.2		ug/L	101	55 - 145	
Tetrachloroethene	20.0	22.7		ug/L	113	70 - 135	
1,1,1-Trichloroethane	20.0	23.2		ug/L	116	60 - 125	
1,1,2-Trichloroethane	20.0	20.5		ug/L	102	75 - 125	
Trichloroethene	20.0	21.3		ug/L	107	70 - 130	
Vinyl chloride	20.0	21.0		ug/L	105	45 - 135	
Xylenes, total	60.0	65.1		ug/L	108	70 - 130	
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	%Rec	
Dibromofluoromethane	102		75 - 120				
Toluene-d8	97		80 - 120				
4-Bromofluorobenzene	100		80 - 120				

Lab Sample ID: 11J1424-MS1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	D	%Rec	Limits
	Result	Qualifier		Added	Result			
Acetone	<10.0	CIN	20.0	15.4	CIN	74	45 - 150	

Client Sample ID: 29731-MW-33

Prep Type: Total

Prep Batch: 11J1424_P

%Rec.

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 11J1424-MS1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Client Sample ID: 29731 MW-33

Prep Type: Total

Prep Batch: 11J1424_P

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike				
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethane	<1.00		20.0	17.4		ug/L	87	50 - 130	
1,2-Dichloroethane	<1.00		20.0	17.9		ug/L	89	55 - 140	
1,1-Dichloroethene	<2.00		20.0	16.9		ug/L	84	35 - 135	
cis-1,2-Dichloroethene	<1.00		20.0	18.9		ug/L	94	45 - 135	
trans-1,2-Dichloroethene	<1.00		20.0	17.0		ug/L	85	45 - 145	
Methylene Chloride	<5.00		20.0	17.5		ug/L	86	45 - 145	
Tetrachloroethene	3.55		20.0	19.2		ug/L	78	40 - 135	
1,1,1-Trichloroethane	<1.00		20.0	18.8		ug/L	94	40 - 125	
1,1,2-Trichloroethane	<1.00		20.0	17.4		ug/L	87	60 - 130	
Trichloroethene	<1.00		20.0	17.3		ug/L	86	50 - 130	
Vinyl chloride	<1.00		20.0	17.0		ug/L	85	30 - 135	
Xylenes, total	<3.00		60.0	49.7		ug/L	83	40 - 135	

Matrix Spike **Matrix Spike**

Surrogate	Matrix Spike	Matrix Spike	
	%Recovery	Qualifier	Limits
Dibromofluoromethane	101		75 - 120
Toluene-d8	97		80 - 120
4-Bromofluorobenzene	99		80 - 120

Lab Sample ID: 11J1424-MSD1

Matrix: Water - NonPotable

Analysis Batch: 11J1424

Client Sample ID: 29731 MW-33

Prep Type: Total

Prep Batch: 11J1424_P

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup					
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	RPD	
Acetone	<10.0	CIN	20.0	18.2	CIN	ug/L	89	45 - 150	17	35
1,1-Dichloroethane	<1.00		20.0	17.0		ug/L	85	50 - 130	2	25
1,2-Dichloroethane	<1.00		20.0	17.9		ug/L	90	55 - 140	0.3	15
1,1-Dichloroethene	<2.00		20.0	16.7		ug/L	83	35 - 135	1	30
cis-1,2-Dichloroethene	<1.00		20.0	17.8		ug/L	89	45 - 135	6	20
trans-1,2-Dichloroethene	<1.00		20.0	16.6		ug/L	83	45 - 145	2	35
Methylene Chloride	<5.00		20.0	17.5		ug/L	86	45 - 145	0.06	30
Tetrachloroethene	3.55		20.0	18.4		ug/L	74	40 - 135	4	20
1,1,1-Trichloroethane	<1.00		20.0	17.8		ug/L	89	40 - 125	5	20
1,1,2-Trichloroethane	<1.00		20.0	17.3		ug/L	86	60 - 130	0.5	15
Trichloroethene	<1.00		20.0	16.5		ug/L	83	50 - 130	4	20
Vinyl chloride	<1.00		20.0	15.5		ug/L	78	30 - 135	9	20
Xylenes, total	<3.00		60.0	49.0		ug/L	82	40 - 135	1	20

Matrix Spike Dup **Matrix Spike Dup**

Surrogate	Matrix Spike Dup	Matrix Spike Dup	
	%Recovery	Qualifier	Limits
Dibromofluoromethane	101		75 - 120
Toluene-d8	97		80 - 120
4-Bromofluorobenzene	100		80 - 120

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Lab Sample ID: 11J3858-BLK1 Matrix: Water Analysis Batch: 11J3858										Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11J3858_P			
Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac				
1,4-Dioxane	<6.0		6.0	ug/l			10/29/11 17:38	10/29/11 18:35	1.00				
Surrogate	Blank %Recovery	Blank Qualifier	Limits				Prepared	Analyzed	Dil Fac				
Dibromofluoromethane	106		80 - 120				10/29/11 17:38	10/29/11 18:35	1.00				
Lab Sample ID: 11J3858-BS1 Matrix: Water Analysis Batch: 11J3858										Client Sample ID: Lab Control Sample Prep Type: Total Prep Batch: 11J3858_P %Rec.			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits						
1,4-Dioxane	10.0	9.42	ug/l			94	70 - 125						
Surrogate	LCS %Recovery	LCS Qualifier	Limits										
Dibromofluoromethane	105		80 - 120										
Lab Sample ID: 11J3858-MS1 Matrix: Water Analysis Batch: 11J3858										Client Sample ID: Matrix Spike Prep Type: Total Prep Batch: 11J3858_P %Rec.			
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits				
1,4-Dioxane	<1.00		10.0	9.89	ug/l			99	70 - 130				
Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits										
Dibromofluoromethane	107		80 - 120										
Lab Sample ID: 11J3858-MS2 Matrix: Water Analysis Batch: 11J3858										Client Sample ID: 29731 MW-33 Prep Type: Total Prep Batch: 11J3858_P %Rec.			
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	Limits				
1,4-Dioxane	<6.0		10.0	9.90	ug/l			99	70 - 130				
Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits										
Dibromofluoromethane	112		80 - 120										
Lab Sample ID: 11J3858-MSD1 Matrix: Water Analysis Batch: 11J3858										Client Sample ID: Matrix Spike Duplicate Prep Type: Total Prep Batch: 11J3858_P %Rec.			
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	Limits	RPD			
1,4-Dioxane	<1.00		10.0	9.49	ug/l			95	70 - 130	4	30		
Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits										
Dibromofluoromethane	106		80 - 120										

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM) (Continued)

Lab Sample ID: 11J3858-MSD2 Matrix: Water Analysis Batch: 11J3858										Client Sample ID: 29731 MW-33 Prep Type: Total Prep Batch: 11J3858_P				
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Matrix Spike Dup Unit	D	%Rec	Limits	RPD	RPD	Limit		
1,4-Dioxane	<6.0		10.0	9.34		ug/l		93	70 - 130	6		30		
Surrogate	Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier												
Dibromofluoromethane	110			80 - 120										
Lab Sample ID: 11J3910-BLK1 Matrix: Water Analysis Batch: 11J3910										Client Sample ID: Method Blank Prep Type: Total Prep Batch: 11J3910_P				
Analyte	Blank Result	Blank Qualifier		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac				
1,4-Dioxane	<6.0			6.0		ug/l		10/30/11 19:34	10/30/11 20:23	1.00				
Surrogate	Blank %Recovery	Blank Qualifier		Limits				Prepared	Analyzed	Dil Fac				
Dibromofluoromethane	106			80 - 120				10/30/11 19:34	10/30/11 20:23	1.00				
Lab Sample ID: 11J3910-BS1 Matrix: Water Analysis Batch: 11J3910										Client Sample ID: Lab Control Sample Prep Type: Total Prep Batch: 11J3910_P				
Analyte	Spike Added		Result	LCS Qualifier	LCS Unit		D	%Rec	Limits					
1,4-Dioxane	10.0		9.32		ug/l			93	70 - 125					
Surrogate	LCS %Recovery	LCS Qualifier	Limits											
Dibromofluoromethane	105		80 - 120											
Lab Sample ID: 11J3910-BSD1 Matrix: Water Analysis Batch: 11J3910										Client Sample ID: Lab Control Sample Dup Prep Type: Total Prep Batch: 11J3910_P				
Analyte	Spike Added		Result	LCS Dup Qualifier	LCS Dup Unit		D	%Rec	Limits	RPD				
1,4-Dioxane	10.0		10.4		ug/l			104	70 - 125	11	30			
Surrogate	LCS Dup %Recovery	LCS Dup Qualifier	Limits											
Dibromofluoromethane	104		80 - 120											
Lab Sample ID: 11J3910-MS1 Matrix: Water Analysis Batch: 11J3910										Client Sample ID: Matrix Spike Prep Type: Total Prep Batch: 11J3910_P				
Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Matrix Spike Unit	D	%Rec	Limits					
1,4-Dioxane	<1.00		10.0	9.46		ug/l		95	70 - 130					
Surrogate	Matrix Spike %Recovery	Matrix Spike Qualifier	Limits											
Dibromofluoromethane	106		80 - 120											

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM) (Continued)

Lab Sample ID: 11J3910-MS2

Matrix: Water

Analysis Batch: 11J3910

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Client Sample ID: Matrix Spike			
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.	Prep Type: Total
1,4-Dioxane	<1.00		10.0	9.26		ug/l	93	70 - 130	Prep Batch: 11J3910_P

Surrogate	Matrix Spike	Matrix Spike							%Rec.
	%Recovery	Qualifier	Limits				D	Limits	
Dibromofluoromethane	108		80 - 120						

Lab Sample ID: 11J3910-MSD1

Matrix: Water

Analysis Batch: 11J3910

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Client Sample ID: Matrix Spike Duplicate			Prep Type: Total
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.	
1,4-Dioxane	<1.00		10.0	9.51		ug/l	95	70 - 130	Prep Batch: 11J3910_P

Surrogate	Matrix Spike Dup	Matrix Spike Dup							RPD
	%Recovery	Qualifier	Limits				D	Limits	
Dibromofluoromethane	106		80 - 120						0.5

Lab Sample ID: 11J3910-MSD2

Matrix: Water

Analysis Batch: 11J3910

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Client Sample ID: Matrix Spike Duplicate			Prep Type: Total
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.	
1,4-Dioxane	<1.00		10.0	8.30		ug/l	83	70 - 130	Prep Batch: 11J3910_P

Surrogate	Matrix Spike Dup	Matrix Spike Dup							RPD
	%Recovery	Qualifier	Limits				D	Limits	
Dibromofluoromethane	107		80 - 120						11

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

GCMS Volatiles

Analysis Batch: 11J1305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1221-05	29728 MW-20	Total	Ground Water	SW	11J1305_P

Analysis Batch: 11J1424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J1424-BLK1	Method Blank	Total	Water - NonPotable	SW 8260B	11J1424_P
11J1424-BS1	Lab Control Sample	Total	Water - NonPotable	SW 8260B	11J1424_P
11J1424-MS1	29731 MW-33	Total	Water - NonPotable	SW 8260B	11J1424_P
11J1424-MSD1	29731 MW-33	Total	Water - NonPotable	SW 8260B	11J1424_P
CUJ1221-01	29724 MW-12	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-02	29725 MW-18	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-03	29726 MW-19	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-04	29727 D01	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-05	29728 MW-20	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-06	29729 MWR-30	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-07	29730 MW-31	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-08	29731 MW-33	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-09	29732 MW-34	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-10	29734 EB-02	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-11	29733 EB-01	Total	Ground Water	SW 8260B	11J1424_P
CUJ1221-12	29735 TB01	Total	Water	SW 8260B	11J1424_P

Analysis Batch: 11J1446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1221-01	29724 MW-12	Total	Ground Water	SW	11J1446_P
CUJ1221-02	29725 MW-18	Total	Ground Water	SW	11J1446_P
CUJ1221-03	29726 MW-19	Total	Ground Water	SW	11J1446_P
CUJ1221-04	29727 D01	Total	Ground Water	SW	11J1446_P
CUJ1221-06	29729 MWR-30	Total	Ground Water	SW	11J1446_P
CUJ1221-07	29730 MW-31	Total	Ground Water	SW	11J1446_P
CUJ1221-08	29731 MW-33	Total	Ground Water	SW	11J1446_P
CUJ1221-09	29732 MW-34	Total	Ground Water	SW	11J1446_P
CUJ1221-10	29734 EB-02	Total	Ground Water	SW	11J1446_P
CUJ1221-11	29733 EB-01	Total	Ground Water	SW	11J1446_P
CUJ1221-12	29735 TB01	Total	Water	SW	11J1446_P

Prep Batch: 11J1305_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1221-05	29728 MW-20	Total	Ground Water	Default Prep VOC	

Prep Batch: 11J1424_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J1424-BLK1	Method Blank	Total	Water - NonPotable	SW 5030B	
11J1424-BS1	Lab Control Sample	Total	Water - NonPotable	SW 5030B	
11J1424-MS1	29731 MW-33	Total	Water - NonPotable	SW 5030B	
11J1424-MSD1	29731 MW-33	Total	Water - NonPotable	SW 5030B	

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

GCMS Volatiles (Continued)

Prep Batch: 11J1424_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1221-01	29724 MW-12	Total	Ground Water	SW 5030B	
CUJ1221-02	29725 MW-18	Total	Ground Water	SW 5030B	
CUJ1221-03	29726 MW-19	Total	Ground Water	SW 5030B	
CUJ1221-04	29727 D01	Total	Ground Water	SW 5030B	
CUJ1221-05	29728 MW-20	Total	Ground Water	SW 5030B	
CUJ1221-06	29729 MWR-30	Total	Ground Water	SW 5030B	
CUJ1221-07	29730 MW-31	Total	Ground Water	SW 5030B	
CUJ1221-08	29731 MW-33	Total	Ground Water	SW 5030B	
CUJ1221-09	29732 MW-34	Total	Ground Water	SW 5030B	
CUJ1221-10	29734 EB-02	Total	Ground Water	SW 5030B	
CUJ1221-11	29733 EB-01	Total	Ground Water	SW 5030B	
CUJ1221-12	29735 TB01	Total	Water	SW 5030B	

Prep Batch: 11J1446_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUJ1221-01	29724 MW-12	Total	Ground Water	Default Prep	
CUJ1221-02	29725 MW-18	Total	Ground Water	VOC	
CUJ1221-03	29726 MW-19	Total	Ground Water	Default Prep	
CUJ1221-04	29727 D01	Total	Ground Water	VOC	
CUJ1221-06	29729 MWR-30	Total	Ground Water	Default Prep	
CUJ1221-07	29730 MW-31	Total	Ground Water	VOC	
CUJ1221-08	29731 MW-33	Total	Ground Water	Default Prep	
CUJ1221-09	29732 MW-34	Total	Ground Water	VOC	
CUJ1221-10	29734 EB-02	Total	Ground Water	Default Prep	
CUJ1221-11	29733 EB-01	Total	Ground Water	VOC	
CUJ1221-12	29735 TB01	Total	Water	Default Prep	

GCMS-Volatiles

Analysis Batch: 11J3858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J3858-BLK1	Method Blank	Total	Water	EPA 8260B-SIM	11J3858_P
11J3858-BS1	Lab Control Sample	Total	Water	EPA 8260B-SIM	11J3858_P
11J3858-MS1	Matrix Spike	Total	Water	EPA 8260B-SIM	11J3858_P
11J3858-MS2	29731 MW-33	Total	Water	EPA 8260B-SIM	11J3858_P
11J3858-MSD1	Matrix Spike Duplicate	Total	Water	EPA 8260B-SIM	11J3858_P
11J3858-MSD2	29731 MW-33	Total	Water	EPA 8260B-SIM	11J3858_P
CUJ1221-01	29724 MW-12	Total	Ground Water	EPA 8260B-SIM	11J3858_P
CUJ1221-02	29725 MW-18	Total	Ground Water	EPA 8260B-SIM	11J3858_P
CUJ1221-04	29727 D01	Total	Ground Water	EPA 8260B-SIM	11J3858_P
CUJ1221-08	29731 MW-33	Total	Ground Water	EPA 8260B-SIM	11J3858_P
CUJ1221-09	29732 MW-34	Total	Ground Water	EPA 8260B-SIM	11J3858_P
CUJ1221-10	29734 EB-02	Total	Ground Water	EPA 8260B-SIM	11J3858_P
CUJ1221-11	29733 EB-01	Total	Ground Water	EPA 8260B-SIM	11J3858_P

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

GCMS-Volatiles (Continued)

Analysis Batch: 11J3858 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 8260B-SIM	11J3858_P

Analysis Batch: 11J3910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-BLK1	Method Blank	Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-BS1	Lab Control Sample	Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-BSD1	Lab Control Sample Dup	Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-MS1	Matrix Spike	Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-MS2	Matrix Spike	Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-MSD1	Matrix Spike Duplicate	Total	Water	EPA 8260B-SIM	11J3910_P
11J3910-MSD2	Matrix Spike Duplicate	Total	Water	EPA 8260B-SIM	11J3910_P
CUJ1221-03	29726 MW-19	Total	Ground Water	EPA 8260B-SIM	11J3910_P
CUJ1221-05	29728 MW-20	Total	Ground Water	EPA 8260B-SIM	11J3910_P

Prep Batch: 11J3858_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 5030B	
11J3858-BLK1	Method Blank	Total	Water	EPA 5030B	
11J3858-BS1	Lab Control Sample	Total	Water	GCMS	
11J3858-MS1	Matrix Spike	Total	Water	EPA 5030B	
11J3858-MS2	29731 MW-33	Total	Water	GCMS	
11J3858-MSD1	Matrix Spike Duplicate	Total	Water	EPA 5030B	
11J3858-MSD2	29731 MW-33	Total	Water	GCMS	
CUJ1221-01	29724 MW-12	Total	Ground Water	EPA 5030B	
CUJ1221-02	29725 MW-18	Total	Ground Water	GCMS	
CUJ1221-04	29727 D01	Total	Ground Water	EPA 5030B	
CUJ1221-08	29731 MW-33	Total	Ground Water	GCMS	
CUJ1221-09	29732 MW-34	Total	Ground Water	EPA 5030B	
CUJ1221-10	29734 EB-02	Total	Ground Water	GCMS	
CUJ1221-11	29733 EB-01	Total	Ground Water	EPA 5030B	
CUJ1221-12	29735 TB01	Total	Water	GCMS	
				EPA 5030B	
				GCMS	

Prep Batch: 11J3910_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 5030B	
11J3910-BLK1	Method Blank	Total	Water	GCMS	
11J3910-BS1	Lab Control Sample	Total	Water	EPA 5030B	
11J3910-BSD1	Lab Control Sample Dup	Total	Water	GCMS	
11J3910-MS1	Matrix Spike	Total	Water	EPA 5030B	
11J3910-MS2	Matrix Spike	Total	Water	GCMS	
				EPA 5030B	
				GCMS	

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

GCMS-Volatiles (Continued)

Prep Batch: 11J3910_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11J3910-MSD1	Matrix Spike Duplicate	Total	Water	EPA 5030B GCMS	
11J3910-MSD2	Matrix Spike Duplicate	Total	Water	EPA 5030B GCMS	
CUJ1221-03	29726 MW-19	Total	Ground Water	EPA 5030B GCMS	
CUJ1221-05	29728 MW-20	Total	Ground Water	EPA 5030B GCMS	

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29724 MW-12

Lab Sample ID: CUJ1221-01

Date Collected: 10/19/11 08:31

Date Received: 10/19/11 14:07

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 10:36	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 01:22	GMK	TAL IRV

Client Sample ID: 29725 MW-18

Lab Sample ID: CUJ1221-02

Date Collected: 10/19/11 09:06

Date Received: 10/19/11 14:07

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 10:14	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 01:51	GMK	TAL IRV

Client Sample ID: 29726 MW-19

Lab Sample ID: CUJ1221-03

Date Collected: 10/19/11 09:37

Date Received: 10/19/11 14:07

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 09:51	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3910_P	10/30/11 19:34	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		2.0	11J3910	10/30/11 22:20	GMK	TAL IRV

Client Sample ID: 29727 D01

Lab Sample ID: CUJ1221-04

Date Collected: 10/19/11 00:00

Date Received: 10/19/11 14:07

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 14:19	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 02:49	GMK	TAL IRV

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29728 MW-20

Date Collected: 10/19/11 10:08

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-05

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		10.0	11J1424	10/26/11 13:35	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1305_P	10/25/11 16:37	EEE	TAL CF
Total	Analysis	SW		1.00	11J1305	10/25/11 16:42	EEE	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3910_P	10/30/11 19:34	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		5.0	11J3910	10/30/11 22:49	GMK	TAL IRV

Client Sample ID: 29729 MWR-30

Date Collected: 10/19/11 07:44

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-06

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 09:29	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF

Client Sample ID: 29730 MW-31

Date Collected: 10/19/11 11:17

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-07

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 09:06	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF

Client Sample ID: 29731 MW-33

Date Collected: 10/19/11 12:05

Date Received: 10/19/11 14:07

Lab Sample ID: CUJ1221-08

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 08:44	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/29/11 21:58	GMK	TAL IRV

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Client Sample ID: 29732 MW-34

Lab Sample ID: CUJ1221-09

Date Collected: 10/19/11 10:43

Matrix: Ground Water

Date Received: 10/19/11 14:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 08:22	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 03:47	GMK	TAL IRV

Client Sample ID: 29734 EB-02

Lab Sample ID: CUJ1221-10

Date Collected: 10/19/11 12:20

Matrix: Ground Water

Date Received: 10/19/11 14:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 07:59	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 04:16	GMK	TAL IRV

Client Sample ID: 29733 EB-01

Lab Sample ID: CUJ1221-11

Date Collected: 10/18/11 16:27

Matrix: Ground Water

Date Received: 10/19/11 14:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 07:37	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 04:45	GMK	TAL IRV

Client Sample ID: 29735 TB01

Lab Sample ID: CUJ1221-12

Date Collected: 10/19/11 14:00

Matrix: Water

Date Received: 10/19/11 14:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11J1424_P	10/26/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11J1424	10/26/11 14:42	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11J1446_P	10/27/11 14:02	ZTB	TAL CF
Total	Analysis	SW		1.00	11J1446	10/27/11 14:05	ZTB	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11J3858_P	10/29/11 17:38	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11J3858	10/30/11 05:14	GMK	TAL IRV

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401
TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

Definitions/Glossary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
CIN	The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria specified in EPA methods 8260B/8270C.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Cedar Falls	AIHA - LAP	IHLAP		101044
TestAmerica Cedar Falls	Illinois	NELAC	5	200024
TestAmerica Cedar Falls	Iowa	State Program	7	7
TestAmerica Cedar Falls	Kansas	NELAC	7	E-10341
TestAmerica Cedar Falls	Minnesota	NELAC	5	019-999-319
TestAmerica Cedar Falls	North Dakota	State Program	8	R-186
TestAmerica Cedar Falls	Oregon	NELAC	10	IA100001
TestAmerica Cedar Falls	Wisconsin	State Program	5	999917270
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 10.001r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	USDA		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 11-233

TestAmerica Job ID: CUJ1221

Method	Method Description	Protocol	Laboratory
SW	VOC Preservation Check	TAL CF	
SW 8260B	Volatile Organic Compounds	TAL CF	
EPA 8260B-SIM	1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)	TAL IRV	

Protocol References:

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sauer Danfoss – Ames Iowa
TA Work Order #CUJ1221

Case Narrative

TestAmerica – Cedar Falls received 12 samples on October 19, 2011 on ice and within temperature requirements. Requested analysis were for 8260 Volatiles and 1,4-Dioxane by 8260 SIM.

Sample ID		Date	
Field	Lab ID	Collected	Received
29724 MW-12	CUJ1221-01	10/19/11 08:31	10-19-11 14:07
29725 MW-18	CUJ1221-02	10/19/11 09:06	10-19-11 14:07
29726 MW-19	CUJ1221-03	10/19/11 09:37	10-19-11 14:07
29727 D01	CUJ1221-04	10/19/11	10-19-11 14:07
29728 MW-20	CUJ1221-05	10/19/11 10:08	10-19-11 14:07
29729 MWR-30	CUJ1221-06	10/19/11 07:44	10-19-11 14:07
29730 MW-31	CUJ1221-07	10/19/11 11:17	10-19-11 14:07
29731 MW-33	CUJ1221-08	10/19/11 12:05	10-19-11 14:07
29732 MW-34	CUJ1221-09	10/19/11 10:43	10-19-11 14:07
29734 EB-02	CUJ1221-10	10/19/11 12:20	10-19-11 14:07
29733 EB-01	CUJ1221-11	10/19/11 16:27	10-19-11 14:07
29735 TB-01	CUJ1221-12	10/19/11 14:00	10-19-11 14:07

8260 Volatiles (Batch #11J1424)

Method Blank – No deviations

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – No deviations

Sample Dilutions – Dilutions was performed on CUJ1221-05 due to target analyte concentrations.

Clarification of Data Qualifier:

CIN: The %RSD for Acetone (16.14%) was above laboratory control limits (15%). The average %RSD for all compounds in the calibration met the %15 criteria.

8260 1,4-Dioxane (Batch#11J3858 and 11J3910)

Method Blank – No deviations

Page 1 of 2

TestAmerica – Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613

(800) 740-2401 / (319) 277-2425 fax

11/8/2011



THE LEADER IN ENVIRONMENTAL TESTING

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – No deviations

Sample Dilutions – Dilutions was performed on CUJ1221-03 due to a matrix interferant.

There is no data quality issues associated with samples analyzed under this work order.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613

Phone 319-277-2401 or 800-750-2401
Fax 319-277-2425

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring

Client Name: Fehr-Graham + Associates Client #: _____

Address: 221 E. Main St.

City/State/Zip Code: Freeport, IL 61032

Project Manager: Joel Zirkle

Email Address: EJarnett@fehr-graham.com

Telephone Number: 815-394-4700 Fax: 815-394-4702

Sampler Name: (Print Name) Mike Day

Sampler Signature: Mike Day

Project Name: _____

Project #: _____

Site/Location ID: _____ State: _____

Report To: _____

Invoice To: _____

Quote #: _____ PO#: _____

TAT <input checked="" type="checkbox"/> Standard Rush (surcharges may apply)	Date Needed:	Date Sampled	Time Sampled	Matrix	Preservation & # of Containers		Analyze For:										QC Deliverables					
					G = Grab, C = Composite	Field Filtered	SL - Sludge	DW - Drinking Water	S - Soil/Solid	Specify Other	HNO ₃	HCl	NaOH	H ₂ SO ₄	Methanol	None	Other (Specify)	See Attached Note				
29724 - MW12	10-19-11	8:31	G	GW	6						X	X										
29725 - MW18		9:06			6						X	X										
29726 - MW19		9:37			6						X	X										
29727 - D01		-			6						X	X										
29728 - MW20		10:08			6						X	X										
29729 - MWR30		7:44			3						X											
29730 - MW31		11:17			3						X											
29731 - MW33		12:05			18						X	X										* See note below
29732 - MW34		10:43			6						X	X										
29734 - EB-02		12:20	-	DI	6						X	X										

Special Instructions: MS/MSD taken at MW-33

Relinquished By: <u>Zirkle</u>	Date: <u>10-19-11</u>	Time: <u>2:00</u>	Received By: <u>Mike Day</u>	Date: <u>10-19-11</u>	Time: <u>14:07</u>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAL-0033 (0708)

Page 2 of 2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613**

**Phone 319-277-2401 or 800-750-2401
Fax 319-277-2425**

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?

THE LEADER IN ENVIRONMENTAL TESTING

Client Name: Fehr-Graham & Associates Client #: _____
Address: 221 E. Main St.
City/State/Zip Code: Freeport, IL 61032
Project Manager: Jed Zinkle
Email Address: EJorrett@fehr-graham.com
Telephone Number: 815-394-4700 Fax: 815-394-4702
Sampler Name: (Print Name) Mike Day
Sampler Signature: Mike Day

Project Name: Sauer - Danfoss
Project #: 11-233
Site/Location ID: _____ State: _____
Report To: _____
Invoice To: _____
Quote #: _____ PO#: _____

Special Instructions:

Relinquished By: <i>Mike Day</i>	Date: 10-19-11	Time: 2:00	Received By: <i>J. J. Lusk</i>	Date: 10/19/11	Time: 14:07	
Relinquished By: <i>J.</i>	Date:	Time:	Received By:	Date:	Time:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	

TABLE 1
ANALYTE LIST

Acetone*
1,1-Dichloroethane*
1,2-Dichloroethane
1,1-Dichloroethene*
cis-1,2-Dichloroethene*
trans-1,2-Dichloroethene
1,4 Dioxane**
Methylene Chloride
Tetrachloroethene*
1,1,1-Trichloroethane*
1,1,2-Trichloroethane
Trichloroethene*
Vinyl Chloride***
Total Xylenes*

- * Required by Sauer-Danfoss's Permit No. 6593-3.
** Required for select monitoring wells.
*** Beginning second quarter 2002, as requested in the United States Environmental Protection Agency (US EPA) comments on the 2002 Annual Site Sampling Report.

Sample Receipt and Temperature Log Form

Client: Fehr - Graham & Assoc. Project: _____City: Freeport FLDate: 10/19/11 Receiver's Initials: JL Time (Delivered): 2:07**Temperature Record:****Cooler ID# (If Applicable)**17115.8 °C / On Ice**Thermometer:**

- IR - 111531565 'D'
- IR - 111531506 'E'
- IR - 61854108 'Front'
- 101681126

 Temp Blank + none Temperature out of compliance**Courier:**

- UPS
- FedEx
- FedEx Ground
- US Postal Service
- Spee-Dee
- TA Courier
- TA Field Services
- Client
- Other

Custody seals present?

 Yes

Custody seals intact?

 Yes No Non-Conformance report started**Exceptions Noted**

- Sample(s) not received in a cooler.
- Samples(s) received same day of sampling.
- Evidence of a chilling process
- No Temp. Blank. Inside temperature of cooler recorded.
- Temperature not taken:

*Refer to SOP CF-SS-01 for Temperature Criteria

ATTACHMENT 6

Laboratory Report for December 13, 2011 Additional Sampling Event

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

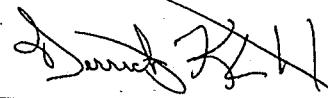
ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Cedar Falls
704 Enterprise Drive
Cedar Falls, IA 50613
Tel: 800-750-2401

TestAmerica Job ID: CUL0735
Client Project/Site: 10-500
Client Project Description: Sauer Danfoss - Ames, Iowa

For:
FEHR-GRAHAM & ASSOCIATES - FREEPORT
221 E. Main St., Ste. 200
Freeport, IL 61032

Attn: Amy Schneiderman



Authorized for release by:
12/30/2011 5:06:57 PM

Derrick Klinkenberg
Organics Manager
derrick.klinkenberg@testamericainc.com

LINKS

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results through

Total Access

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The
Expert

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www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
CUL0735-01	29801 MW-10	Ground Water	12/13/11 09:40	12/13/11 13:24
CUL0735-02	29802 MW-R13	Ground Water	12/12/11 16:30	12/13/11 13:24
CUL0735-03	29803 MW-R14R	Ground Water	12/13/11 08:02	12/13/11 13:24
CUL0735-04	29804 MW-34	Ground Water	12/12/11 14:34	12/13/11 13:24
CUL0735-05	29805 Dup	Ground Water	12/13/11 08:02	12/13/11 13:24
CUL0735-06	29808 EB-1	Ground Water	12/12/11 17:20	12/13/11 13:24
CUL0735-07	29809 EB-2	Ground Water	12/13/11 10:00	12/13/11 13:24
CUL0735-08	Trip Blank	Water	12/12/11 00:00	12/13/11 13:24

Detection Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29801 MW-10

Lab Sample ID: CUL0735-01

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	11.4		5.00	ug/L		5.00		SW 8260B	Total
1,1-Dichloroethene	39.0		10.0	ug/L		5.00		SW 8260B	Total
cis-1,2-Dichloroethene	17.0		5.00	ug/L		5.00		SW 8260B	Total
Tetrachloroethene	465		5.00	ug/L		5.00		SW 8260B	Total
1,1,1-Trichloroethane	246		5.00	ug/L		5.00		SW 8260B	Total
Trichloroethene	20.0		5.00	ug/L		5.00		SW 8260B	Total
1,4-Dioxane	12		6.0	ug/L		1.0		EPA 8260B-SIM	Total
Sulfate	29.7		5.00	mg/L		5.00		SW 9056	Total

Client Sample ID: 29802 MW-R13

Lab Sample ID: CUL0735-02

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	251		100	ug/L		100		SW 8260B	Total
1,1-Dichloroethene	250		200	ug/L		100		SW 8260B	Total
Tetrachloroethene	3150		100	ug/L		100		SW 8260B	Total
1,1,1-Trichloroethane	1050		100	ug/L		100		SW 8260B	Total
Sulfate	2090		200	mg/L		200		SW 9056	Total

Client Sample ID: 29803 MW-R14R

Lab Sample ID: CUL0735-03

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	5.29		1.00	ug/L		1.00		SW 8260B	Total
1,1-Dichloroethene	9.66		2.00	ug/L		1.00		SW 8260B	Total
Tetrachloroethene	3.67		1.00	ug/L		1.00		SW 8260B	Total
1,1,1-Trichloroethane	30.0		1.00	ug/L		1.00		SW 8260B	Total
Sulfate	46.4		2.00	mg/L		2.00		SW 9056	Total

Client Sample ID: 29804 MW-34

Lab Sample ID: CUL0735-04

No Detections

Client Sample ID: 29805 Dup

Lab Sample ID: CUL0735-05

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.97		1.00	ug/L		1.00		SW 8260B	Total
1,1-Dichloroethene	9.91		2.00	ug/L		1.00		SW 8260B	Total
Tetrachloroethene	3.83		1.00	ug/L		1.00		SW 8260B	Total
1,1,1-Trichloroethane	30.5		1.00	ug/L		1.00		SW 8260B	Total

Client Sample ID: 29808 EB-1

Lab Sample ID: CUL0735-06

No Detections

Client Sample ID: 29809 EB-2

Lab Sample ID: CUL0735-07

No Detections

Client Sample ID: Trip Blank

Lab Sample ID: CUL0735-08

No Detections

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29801 MW-10

Date Collected: 12/13/11 09:40

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-01

Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<50.0	L1	50.0		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
1,1-Dichloroethane	11.4		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
1,2-Dichloroethane	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
1,1-Dichloroethene	39.0		10.0		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
cis-1,2-Dichloroethene	17.0		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
trans-1,2-Dichloroethene	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
Methylene Chloride	<25.0		25.0		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
Tetrachloroethene	465		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
1,1,1-Trichloroethane	246		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
1,1,2-Trichloroethane	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
Trichloroethene	20.0		5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
Vinyl chloride	<5.00	CIN	5.00		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
Xylenes, total	<15.0		15.0		ug/L		12/16/11 00:00	12/16/11 18:58	5.00
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	83		75 - 120				12/16/11 00:00	12/16/11 18:58	5.00
Toluene-d8	95		80 - 120				12/16/11 00:00	12/16/11 18:58	5.00
4-Bromofluorobenzene	102		75 - 110				12/16/11 00:00	12/16/11 18:58	5.00

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/16/11 15:57	12/19/11 11:28	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	12		6.0		ug/l		12/18/11 15:58	12/18/11 18:47	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	121	Z	80 - 120				12/18/11 15:58	12/18/11 18:47	1.0

Method: SW 9056 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	29.7		5.00		mg/L		12/14/11 04:27	12/14/11 04:27	5.00

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT

TestAmerica Job ID: CUL0735

Project/Site: 10-500

Client Sample ID: 29802 MW-R13

Lab Sample ID: CUL0735-02

Matrix: Ground Water

Date Collected: 12/12/11 16:30

Date Received: 12/13/11 13:24

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<1000	L1	1000		ug/L		12/16/11 00:00	12/16/11 19:23	100
1,1-Dichloroethane	251		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
1,2-Dichloroethane	<100		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
1,1-Dichloroethene	250		200		ug/L		12/16/11 00:00	12/16/11 19:23	100
cis-1,2-Dichloroethene	<100		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
trans-1,2-Dichloroethene	<100		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
Methylene Chloride	<500		500		ug/L		12/16/11 00:00	12/16/11 19:23	100
Tetrachloroethene	3150		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
1,1,1-Trichloroethane	1050		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
1,1,2-Trichloroethane	<100		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
Trichloroethene	<100		100		ug/L		12/16/11 00:00	12/16/11 19:23	100
Vinyl chloride	<100	CIN	100		ug/L		12/16/11 00:00	12/16/11 19:23	100
Xylenes, total	<300		300		ug/L		12/16/11 00:00	12/16/11 19:23	100
<i>Surrogate</i>		%Recovery	Qualifier	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Dibromofluoromethane	85			75 - 120			12/16/11 00:00	12/16/11 19:23	100
Toluene-d8	98			80 - 120			12/16/11 00:00	12/16/11 19:23	100
4-Bromofluorobenzene	102			75 - 110			12/16/11 00:00	12/16/11 19:23	100

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/16/11 15:57	12/19/11 11:28	1.00

Method: EPA 8260B-SIM - 1,4-Dioxane BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<60		60		ug/l		12/22/11 08:29	12/22/11 12:32	10
<i>Surrogate</i>	%Recovery	Qualifier	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Dibromofluoromethane	89		80 - 120				12/22/11 08:29	12/22/11 12:32	10

Method: SW 9056 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2090		200		mg/L		12/14/11 04:27	12/14/11 04:27	200

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29803 MW-R14R
Date Collected: 12/13/11 08:02
Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-03
Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
1,1-Dichloroethane	5.29		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
1,1-Dichloroethene	9.66		2.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
Methylene Chloride	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
Tetrachloroethene	3.67		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
1,1,1-Trichloroethane	30.0		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
Trichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
Xylenes, total	<3.00		3.00		ug/L		12/16/11 00:00	12/16/11 18:33	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	86		75 - 120				12/16/11 00:00	12/16/11 18:33	1.00
Toluene-d8	97		80 - 120				12/16/11 00:00	12/16/11 18:33	1.00
4-Bromofluorobenzene	106		75 - 110				12/16/11 00:00	12/16/11 18:33	1.00
Method: SW 9041 - VOC Preservation Check									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/19/11 15:41	12/19/11 15:50	1.00
Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		12/22/11 08:29	12/22/11 16:32	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	92		80 - 120				12/22/11 08:29	12/22/11 16:32	1.0
Method: SW 9056 - General Chemistry Parameters									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	46.4		2.00		mg/L		12/14/11 04:27	12/14/11 04:27	2.00

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29804 MW-34

Lab Sample ID: CUL0735-04

Date Collected: 12/12/11 14:34

Matrix: Ground Water

Date Received: 12/13/11 13:24

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
Methylene Chloride	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
Tetrachloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
Trichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
Xylenes, total	<3.00		3.00		ug/L		12/16/11 00:00	12/16/11 18:08	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	82		75 - 120				12/16/11 00:00	12/16/11 18:08	1.00
Toluene-d8	93		80 - 120				12/16/11 00:00	12/16/11 18:08	1.00
4-Bromofluorobenzene	100		75 - 110				12/16/11 00:00	12/16/11 18:08	1.00

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/19/11 15:41	12/19/11 15:50	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		12/18/11 15:58	12/18/11 21:12	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	119		80 - 120				12/18/11 15:58	12/18/11 21:12	1.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29805 Dup
 Date Collected: 12/13/11 08:02
 Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-05
 Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
1,1-Dichloroethane	4.97		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
1,1-Dichloroethene	9.91		2.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
Methylene Chloride	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
Tetrachloroethene	3.83		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
1,1,1-Trichloroethane	30.5		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
Trichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00
Xylenes, total	<3.00		3.00		ug/L		12/16/11 00:00	12/16/11 21:29	1.00

Surrogate

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	83		75 - 120		12/16/11 00:00	12/16/11 21:29
Toluene-d8	97		80 - 120		12/16/11 00:00	12/16/11 21:29
4-Bromofluorobenzene	104		75 - 110		12/16/11 00:00	12/16/11 21:29

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/19/11 15:41	12/19/11 15:50	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		12/22/11 08:29	12/22/11 17:02	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	91		80 - 120				12/22/11 08:29	12/22/11 17:02	1.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT

TestAmerica Job ID: CUL0735

Project/Site: 10-500

Client Sample ID: 29808 EB-1

Date Collected: 12/12/11 17:20

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-06

Matrix: Ground Water

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Method: SW 8260B - Volatile Organic Compounds									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
Methylene Chloride	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
Tetrachloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
Trichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
Xylenes, total	<3.00		3.00		ug/L		12/16/11 00:00	12/16/11 17:43	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	82		75 - 120				12/16/11 00:00	12/16/11 17:43	1.00
Toluene-d8	97		80 - 120				12/16/11 00:00	12/16/11 17:43	1.00
4-Bromofluorobenzene	107		75 - 110				12/16/11 00:00	12/16/11 17:43	1.00

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/19/11 15:41	12/19/11 15:50	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		12/22/11 08:29	12/22/11 14:02	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	95		80 - 120				12/22/11 08:29	12/22/11 14:02	1.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29809 EB-2
Date Collected: 12/13/11 10:00
Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-07
Matrix: Ground Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
Methylene Chloride	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
Tetrachloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
Trichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
Xylenes, total	<3.00		3.00		ug/L		12/16/11 00:00	12/16/11 17:18	1.00
<hr/>									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	84		75 - 120				12/16/11 00:00	12/16/11 17:18	1.00
Toluene-d8	94		80 - 120				12/16/11 00:00	12/16/11 17:18	1.00
4-Bromofluorobenzene	100		75 - 110				12/16/11 00:00	12/16/11 17:18	1.00

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/19/11 15:41	12/19/11 15:50	1.00

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	<6.0		6.0		ug/l		12/22/11 08:29	12/22/11 14:32	1.0
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	98		80 - 120				12/22/11 08:29	12/22/11 14:32	1.0

Client Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
 Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: Trip Blank

Date Collected: 12/12/11 00:00

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-08

Matrix: Water

Method: SW 8260B - Volatile Organic Compounds

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
Methylene Chloride	<5.00		5.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
Tetrachloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
Trichloroethene	<1.00		1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
Xylenes, total	<3.00		3.00		ug/L		12/16/11 00:00	12/16/11 16:53	1.00
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Dibromofluoromethane	85		75 - 120				12/16/11 00:00	12/16/11 16:53	1.00
Toluene-d8	95		80 - 120				12/16/11 00:00	12/16/11 16:53	1.00
4-Bromofluorobenzene	103		75 - 110				12/16/11 00:00	12/16/11 16:53	1.00

Method: SW 9041 - VOC Preservation Check

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	<2.00		2.00		units		12/19/11 15:41	12/19/11 15:50	1.00

Surrogate Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method: SW 8260B - Volatile Organic Compounds

Matrix: Ground Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (75-110)
CUL0735-01	29801 MW-10	83	95	102
CUL0735-02	29802 MW-R13	85	98	102
CUL0735-03	29803 MW-R14R	86	97	106
CUL0735-04	29804 MW-34	82	93	100
CUL0735-05	29805 Dup	83	97	104
CUL0735-06	29808 EB-1	82	97	107
CUL0735-07	29809 EB-2	84	94	100

Surrogate Legend

DBFM = Dibromofluoromethane

Toluene-d8 = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (75-110)
CUL0735-08	Trip Blank	85	95	103

Surrogate Legend

DBFM = Dibromofluoromethane

Toluene-d8 = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (75-110)
11L0813-BLK1	Method Blank	90	96	101

Surrogate Legend

DBFM = Dibromofluoromethane

Toluene-d8 = Toluene-d8

BFB = 4-Bromofluorobenzene

Method: SW 8260B - Volatile Organic Compounds

Matrix: Water - NonPotable

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DBFM (75-120)	Toluene-d8 (80-120)	BFB (80-120)
11L0813-BS1	Lab Control Sample	89	98	103
11L0813-MS1	29801 MW-10	89	99	100
11L0813-MSD1	29801 MW-10	87	100	103

Surrogate Legend

DBFM = Dibromofluoromethane

Toluene-d8 = Toluene-d8

Surrogate Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT

Project/Site: 10-500

TestAmerica Job ID: CUL0735

BFB = 4-Bromofluorobenzene

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Matrix: Ground Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DBFM (80-120)	
CUL0735-01	29801 MW-10	121 Z	
CUL0735-02	29802 MW-R13	89	
CUL0735-03	29803 MW-R14R	92	
CUL0735-04	29804 MW-34	119	
CUL0735-05	29805 Dup	91	
CUL0735-06	29808 EB-1	95	
CUL0735-07	29809 EB-2	98	

Surrogate Legend
DBFM = Dibromofluoromethane

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Matrix: Water

Prep Type: Total

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		DBFM (80-120)	
11L2419-BLK1	Method Blank	112	
11L2419-BS1	Lab Control Sample	107	
11L2419-BSD1	Lab Control Sample Dup	111	
11L2419-MS1	29801 MW-10	121 Z	
11L2419-MSD1	29801 MW-10	124 Z	
11L3037-BLK1	Method Blank	89	
11L3037-BS1	Lab Control Sample	85	
11L3037-MS1	Matrix Spike	91	
11L3037-MSD1	Matrix Spike Duplicate	88	

Surrogate Legend
DBFM = Dibromofluoromethane

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method: SW 8260B - Volatile Organic Compounds

Lab Sample ID: 11L0813-BLK1

Matrix: Water - NonPotable

Analysis Batch: 11L0813

Client Sample ID: Method Blank

Prep Type: Total

Prep Batch: 11L0813_P

Analyte	Blank	Blank	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<10.0	L1	10.0		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
1,1-Dichloroethane	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
1,2-Dichloroethane	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
1,1-Dichloroethene	<2.00		2.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
cis-1,2-Dichloroethene	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
trans-1,2-Dichloroethene	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
Methylene Chloride	<5.00		5.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
Tetrachloroethene	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
1,1,1-Trichloroethane	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
1,1,2-Trichloroethane	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
Trichloroethene	<1.00		1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
Vinyl chloride	<1.00	CIN	1.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
Xylenes, total	<3.00		3.00		ug/L				12/16/11 00:00	12/16/11 11:51	1.00
Surrogate	Blank	Blank	%Recovery	Qualifier	Limits			D	Prepared	Analyzed	Dil Fac
Dibromofluoromethane	90		75 - 120						12/16/11 00:00	12/16/11 11:51	1.00
Toluene-d8	96		80 - 120						12/16/11 00:00	12/16/11 11:51	1.00
4-Bromofluorobenzene	101		75 - 110						12/16/11 00:00	12/16/11 11:51	1.00

Lab Sample ID: 11L0813-BS1

Matrix: Water - NonPotable

Analysis Batch: 11L0813

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11L0813_P

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Acetone	20.0	30.2	L1	ug/L		151	60 - 150
1,1-Dichloroethane	20.0	19.0		ug/L		95	60 - 130
1,2-Dichloroethane	20.0	16.6		ug/L		83	65 - 140
1,1-Dichloroethene	20.0	19.2		ug/L		96	60 - 135
cis-1,2-Dichloroethene	20.0	19.9		ug/L		99	70 - 135
trans-1,2-Dichloroethene	20.0	20.1		ug/L		101	60 - 145
Methylene Chloride	20.0	17.8		ug/L		89	55 - 145
Tetrachloroethene	20.0	21.5		ug/L		107	70 - 135
1,1,1-Trichloroethane	20.0	20.9		ug/L		105	60 - 125
1,1,2-Trichloroethane	20.0	21.5		ug/L		107	75 - 125
Trichloroethene	20.0	21.6		ug/L		108	70 - 130
Vinyl chloride	20.0	20.3	CIN	ug/L		102	45 - 135
Xylenes, total	60.0	63.6		ug/L		106	70 - 130
Surrogate	%Recovery	LCS					
		Result	Qualifier				
Dibromofluoromethane	89	75 - 120					
Toluene-d8	98	80 - 120					
4-Bromofluorobenzene	103	80 - 120					

Lab Sample ID: 11L0813-MS1

Matrix: Water - NonPotable

Analysis Batch: 11L0813

Client Sample ID: 29801 MW-10

Prep Type: Total

Prep Batch: 11L0813_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike		Unit	D	%Rec	Limits
				Result	Qualifier				
Acetone	<50.0	L1	20.0	21.8	L1	ug/L		97	45 - 150

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method: SW 8260B - Volatile Organic Compounds (Continued)

Lab Sample ID: 11L0813-MS1		Client Sample ID: 29801 MW-10					
Matrix: Water - NonPotable		Prep Type: Total					
Analysis Batch: 11L0813		Prep Batch: 11L0813_P					
Analyte	Sample Result	Sample Qualifier	Spike Added				
			Matrix Spike Result				
			Qualifier				
			Unit				
			D				
			%Rec				
			Limits				
1,1-Dichloroethane	11.4		20.0	21.7	ug/L	97	50 - 130
1,2-Dichloroethane	<5.00		20.0	16.3	ug/L	82	55 - 140
1,1-Dichloroethene	39.0		20.0	28.4	ug/L	103	35 - 135
cis-1,2-Dichloroethene	17.0		20.0	23.0	ug/L	98	45 - 135
trans-1,2-Dichloroethene	<5.00		20.0	20.4	ug/L	102	45 - 145
Methylene Chloride	<25.0		20.0	17.9	ug/L	89	45 - 145
Tetrachloroethene	465		20.0	114	ug/L	104	40 - 135
1,1,1-Trichloroethane	246		20.0	72.0	ug/L	115	40 - 125
1,1,2-Trichloroethane	<5.00		20.0	20.2	ug/L	101	60 - 130
Trichloroethene	20.0		20.0	24.7	ug/L	103	50 - 130
Vinyl chloride	<5.00 CIN		20.0	21.4 CIN	ug/L	107	30 - 135
Xylenes, total	<15.0		60.0	61.8	ug/L	103	40 - 135
Surrogate		Matrix Spike %Recovery	Matrix Spike Qualifier	Limits			
Dibromofluoromethane	89			75 - 120			
Toluene-d8	99			80 - 120			
4-Bromofluorobenzene	100			80 - 120			

Lab Sample ID: 11L0813-MSD1
Matrix: Water - NonPotable
Analysis Batch: 11L0813

Lab Sample ID: 11L0813-MSD1		Client Sample ID: 29801 MW-10								
Matrix: Water - NonPotable		Prep Type: Total								
Analysis Batch: 11L0813		Prep Batch: 11L0813_P								
Analyte	Sample Result	Sample Qualifier	Spike Added							
			Matrix Spike Dup Result							
			Qualifier							
			Unit							
			D							
			%Rec							
			RPD							
			Limit							
Acetone	<50.0	L1	20.0	20.4	L1	ug/L	90	45 - 150	7	35
1,1-Dichloroethane	11.4		20.0	20.7		ug/L	92	50 - 130	5	25
1,2-Dichloroethane	<5.00		20.0	15.9		ug/L	79	55 - 140	3	15
1,1-Dichloroethene	39.0		20.0	27.4		ug/L	98	35 - 135	4	30
cis-1,2-Dichloroethene	17.0		20.0	22.6		ug/L	96	45 - 135	2	20
trans-1,2-Dichloroethene	<5.00		20.0	19.6		ug/L	98	45 - 145	4	35
Methylene Chloride	<25.0		20.0	18.1		ug/L	90	45 - 145	1	30
Tetrachloroethene	465		20.0	109		ug/L	82	40 - 135	4	20
1,1,1-Trichloroethane	246		20.0	67.4		ug/L	91	40 - 125	7	20
1,1,2-Trichloroethane	<5.00		20.0	20.8		ug/L	104	60 - 130	3	15
Trichloroethene	20.0		20.0	23.4		ug/L	97	50 - 130	6	20
Vinyl chloride	<5.00 CIN		20.0	21.4 CIN		ug/L	107	30 - 135	0.4	20
Xylenes, total	<15.0		60.0	61.5		ug/L	103	40 - 135	0.5	20
Surrogate		Matrix Spike Dup %Recovery	Matrix Spike Dup Qualifier	Limits						
Dibromofluoromethane	87			75 - 120						
Toluene-d8	100			80 - 120						
4-Bromofluorobenzene	103			80 - 120						

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Lab Sample ID: 11L2419-BLK1

Matrix: Water

Analysis Batch: 11L2419

Analyte	Blank	Blank				D	Client Sample ID: Method Blank		Dil Fac
	Result	Qualifier	RL	MDL	Unit		Prepared	Analyzed	
1,4-Dioxane	<6.0		6.0		ug/l		12/18/11 15:58	12/18/11 16:51	1.00
Surrogate									
Dibromofluoromethane	Blank	Blank	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac
			112		80 - 120		12/18/11 15:58	12/18/11 16:51	1.00

Lab Sample ID: 11L2419-BS1

Matrix: Water

Analysis Batch: 11L2419

Analyte	Spike	LCS	LCS				D	Client Sample ID: Lab Control Sample		%Rec.
	Added	Result	Qualifier	Unit	Prepared	Analyzed		Prepared	Analyzed	
1,4-Dioxane	10.0	9.11		ug/l	12/18/11 15:58	12/18/11 16:51	91	70 - 125		
Surrogate										
Dibromofluoromethane	LCS	LCS	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac	
			107		80 - 120		12/18/11 15:58	12/18/11 16:51	1.00	

Lab Sample ID: 11L2419-BSD1

Matrix: Water

Analysis Batch: 11L2419

Analyte	Spike	LCS Dup	LCS Dup				D	Client Sample ID: Lab Control Sample Dup		RPD	
	Added	Result	Qualifier	Unit	Prepared	Analyzed		Prepared	Analyzed		
1,4-Dioxane	10.0	10.2		ug/l	12/18/11 15:58	12/18/11 16:51	102	70 - 125		11	30
Surrogate											
Dibromofluoromethane	LCS Dup	LCS Dup	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac		
			111		80 - 120		12/18/11 15:58	12/18/11 16:51	1.00		

Lab Sample ID: 11L2419-MS1

Matrix: Water

Analysis Batch: 11L2419

Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike				D	Client Sample ID: 29801 MW-10	
	Result	Qualifier	Added	Result	Qualifier	Unit	Prepared	Analyzed		Prepared	Analyzed
1,4-Dioxane	12		10.0	23.0		ug/l	114	70 - 130			
Surrogate											
Dibromofluoromethane	Matrix Spike	Matrix Spike	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac		
			121	Z	80 - 120		12/18/11 15:58	12/18/11 16:51	1.00		

Lab Sample ID: 11L2419-MSD1

Matrix: Water

Analysis Batch: 11L2419

Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup				D	Client Sample ID: 29801 MW-10	
	Result	Qualifier	Added	Result	Qualifier	Unit	Prepared	Analyzed		Prepared	Analyzed
1,4-Dioxane	12		10.0	21.0		ug/l	94	70 - 130			
Surrogate											
Dibromofluoromethane	Matrix Spike Dup	Matrix Spike Dup	%Recovery	Qualifier	Limits	D	Prepared	Analyzed	Dil Fac		
			124	Z	80 - 120		12/18/11 15:58	12/18/11 16:51	1.00		

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method: EPA 8260B-SIM - 1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM) (Continued)

Lab Sample ID: 11L3037-BLK1										Client Sample ID: Method Blank			
Matrix: Water										Prep Type: Total			
Analysis Batch: 11L3037										Prep Batch: 11L3037_P			
Analyte	Blank	Blank	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
1,4-Dioxane			<6.0		6.0		ug/l		12/22/11 08:29	12/22/11 10:02	1.00		
Surrogate										Prepared	Analyzed	Dil Fac	
Dibromofluoromethane			89		80 - 120				12/22/11 08:29	12/22/11 10:02	1.00		
Lab Sample ID: 11L3037-BS1										Client Sample ID: Lab Control Sample			
Matrix: Water										Prep Type: Total			
Analysis Batch: 11L3037										Prep Batch: 11L3037_P			
Analyte	Spike		LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits			
1,4-Dioxane	Added		9.15		ug/l				92	70 - 125			
Surrogate										%Rec.			
Dibromofluoromethane			85		80 - 120								
Lab Sample ID: 11L3037-MS1										Client Sample ID: Matrix Spike			
Matrix: Water										Prep Type: Total			
Analysis Batch: 11L3037										Prep Batch: 11L3037_P			
Analyte	Sample	Sample	Spike	Matrix Spike	Matrix Spike	Result	Qualifier	Unit	D	%Rec	Limits		
1,4-Dioxane	Result	Qualifier	Added			9.63	ug/l			96	70 - 130		
Surrogate										%Rec.			
Dibromofluoromethane			91		80 - 120								
Lab Sample ID: 11L3037-MSD1										Client Sample ID: Matrix Spike Duplicate			
Matrix: Water										Prep Type: Total			
Analysis Batch: 11L3037										Prep Batch: 11L3037_P			
Analyte	Sample	Sample	Spike	Matrix Spike Dup	Matrix Spike Dup	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,4-Dioxane	Result	Qualifier	Added			9.36	ug/l			94	70 - 130	3	30
Surrogate										%Rec.			
Dibromofluoromethane			88		80 - 120								

Method: SW 9056 - General Chemistry Parameters

Lab Sample ID: 11L0649-BLK1										Client Sample ID: Method Blank			
Matrix: Water - NonPotable										Prep Type: Total			
Analysis Batch: 11L0649										Prep Batch: 11L0649_P			
Analyte	Blank	Blank	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Sulfate			<1.00		1.00		mg/L		12/14/11 04:27	12/14/11 04:27	1.00		

QC Sample Results

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method: SW 9056 - General Chemistry Parameters (Continued)

Lab Sample ID: 11L0649-BS1

Matrix: Water - NonPotable

Analysis Batch: 11L0649

Client Sample ID: Lab Control Sample

Prep Type: Total

Prep Batch: 11L0649_P

Analyte

Sulfate

	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Sulfate	10.0	9.66		mg/L	97	90 - 110		

Lab Sample ID: 11L0649-MS1

Matrix: Water - NonPotable

Analysis Batch: 11L0649

Client Sample ID: 29801 MW-10

Prep Type: Total

Prep Batch: 11L0649_P

Analyte

Sulfate

	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec.	Limits
Sulfate	29.7		25.0	54.4		mg/L	99	80 - 120		

Lab Sample ID: 11L0649-MSD1

Matrix: Water - NonPotable

Analysis Batch: 11L0649

Client Sample ID: 29801 MW-10

Prep Type: Total

Prep Batch: 11L0649_P

Analyte

Sulfate

	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Dup Result	Matrix Spike Dup Qualifier	Unit	D	%Rec	RPD	Limit
Sulfate	29.7		25.0	54.3		mg/L	99	80 - 120	0.2	15

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

GCMS Volatiles

Analysis Batch: 11L0763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUL0735-01	29801 MW-10	Total	Ground Water	SW 9041	11L0763_P
CUL0735-02	29802 MW-R13	Total	Ground Water	SW 9041	11L0763_P

Analysis Batch: 11L0813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11L0813-BLK1	Method Blank	Total	Water - NonPotable	SW 8260B	11L0813_P
11L0813-BS1	Lab Control Sample	Total	Water - NonPotable	SW 8260B	11L0813_P
11L0813-MS1	29801 MW-10	Total	Water - NonPotable	SW 8260B	11L0813_P
11L0813-MSD1	29801 MW-10	Total	Water - NonPotable	SW 8260B	11L0813_P
CUL0735-01	29801 MW-10	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-02	29802 MW-R13	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-03	29803 MW-R14R	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-04	29804 MW-34	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-05	29805 Dup	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-06	29808 EB-1	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-07	29809 EB-2	Total	Ground Water	SW 8260B	11L0813_P
CUL0735-08	Trip Blank	Total	Water	SW 8260B	11L0813_P

Analysis Batch: 11L0833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUL0735-03	29803 MW-R14R	Total	Ground Water	SW 9041	11L0833_P
CUL0735-04	29804 MW-34	Total	Ground Water	SW 9041	11L0833_P
CUL0735-05	29805 Dup	Total	Ground Water	SW 9041	11L0833_P
CUL0735-06	29808 EB-1	Total	Ground Water	SW 9041	11L0833_P
CUL0735-07	29809 EB-2	Total	Ground Water	SW 9041	11L0833_P
CUL0735-08	Trip Blank	Total	Water	SW 9041	11L0833_P

Prep Batch: 11L0763_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUL0735-01	29801 MW-10	Total	Ground Water	Default Prep VOC	
CUL0735-02	29802 MW-R13	Total	Ground Water	Default Prep VOC	

Prep Batch: 11L0813_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11L0813-BLK1	Method Blank	Total	Water - NonPotable	SW 5030B	
11L0813-BS1	Lab Control Sample	Total	Water - NonPotable	SW 5030B	
11L0813-MS1	29801 MW-10	Total	Water - NonPotable	SW 5030B	
11L0813-MSD1	29801 MW-10	Total	Water - NonPotable	SW 5030B	
CUL0735-01	29801 MW-10	Total	Ground Water	SW 5030B	
CUL0735-02	29802 MW-R13	Total	Ground Water	SW 5030B	
CUL0735-03	29803 MW-R14R	Total	Ground Water	SW 5030B	
CUL0735-04	29804 MW-34	Total	Ground Water	SW 5030B	
CUL0735-05	29805 Dup	Total	Ground Water	SW 5030B	
CUL0735-06	29808 EB-1	Total	Ground Water	SW 5030B	
CUL0735-07	29809 EB-2	Total	Ground Water	SW 5030B	

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT

Project/Site: 10-500

TestAmerica Job ID: CUL0735

GCMS Volatiles (Continued)

Prep Batch: 11L0813_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	SW 5030B	

Prep Batch: 11L0833_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Ground Water	Default Prep	
CUL0735-03	29803 MW-R14R	Total	Ground Water	VOC	
CUL0735-04	29804 MW-34	Total	Ground Water	Default Prep	
CUL0735-05	29805 Dup	Total	Ground Water	VOC	
CUL0735-06	29808 EB-1	Total	Ground Water	Default Prep	
CUL0735-07	29809 EB-2	Total	Ground Water	VOC	
CUL0735-08	Trip Blank	Total	Water	Default Prep	
				VOC	

GCMS-Volatiles

Analysis Batch: 11L2419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 8260B-SIM	
11L2419-BLK1	Method Blank	Total	Water	EPA 8260B-SIM	11L2419_P
11L2419-BS1	Lab Control Sample	Total	Water	EPA 8260B-SIM	11L2419_P
11L2419-BSD1	Lab Control Sample Dup	Total	Water	EPA 8260B-SIM	11L2419_P
11L2419-MS1	29801 MW-10	Total	Water	EPA 8260B-SIM	11L2419_P
11L2419-MSD1	29801 MW-10	Total	Water	EPA 8260B-SIM	11L2419_P
CUL0735-01	29801 MW-10	Total	Ground Water	EPA 8260B-SIM	11L2419_P
CUL0735-04	29804 MW-34	Total	Ground Water	EPA 8260B-SIM	11L2419_P

Analysis Batch: 11L3037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 8260B-SIM	
11L3037-BLK1	Method Blank	Total	Water	EPA 8260B-SIM	11L3037_P
11L3037-BS1	Lab Control Sample	Total	Water	EPA 8260B-SIM	11L3037_P
11L3037-MS1	Matrix Spike	Total	Water	EPA 8260B-SIM	11L3037_P
11L3037-MSD1	Matrix Spike Duplicate	Total	Water	EPA 8260B-SIM	11L3037_P
CUL0735-02	29802 MW-R13	Total	Ground Water	EPA 8260B-SIM	11L3037_P
CUL0735-03	29803 MW-R14R	Total	Ground Water	EPA 8260B-SIM	11L3037_P
CUL0735-05	29805 Dup	Total	Ground Water	EPA 8260B-SIM	11L3037_P
CUL0735-06	29808 EB-1	Total	Ground Water	EPA 8260B-SIM	11L3037_P
CUL0735-07	29809 EB-2	Total	Ground Water	EPA 8260B-SIM	11L3037_P

Prep Batch: 11L2419_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
		Total	Water	EPA 5030B	
11L2419-BLK1	Method Blank	Total	Water	GCMS	
11L2419-BS1	Lab Control Sample	Total	Water	EPA 5030B	
11L2419-BSD1	Lab Control Sample Dup	Total	Water	GCMS	
11L2419-MS1	29801 MW-10	Total	Water	EPA 5030B	
11L2419-MSD1	29801 MW-10	Total	Water	GCMS	
CUL0735-01	29801 MW-10	Total	Ground Water	EPA 5030B	
				GCMS	

QC Association Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

GCMS-Volatiles (Continued)

Prep Batch: 11L2419_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
CUL0735-04	29804 MW-34	Total	Ground Water	EPA 5030B GCMS	

Prep Batch: 11L3037_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11L3037-BLK1	Method Blank	Total	Water	EPA 5030B GCMS	
11L3037-BS1	Lab Control Sample	Total	Water	EPA 5030B GCMS	
11L3037-MS1	Matrix Spike	Total	Water	EPA 5030B GCMS	
11L3037-MSD1	Matrix Spike Duplicate	Total	Water	EPA 5030B GCMS	
CUL0735-02	29802 MW-R13	Total	Ground Water	EPA 5030B GCMS	
CUL0735-03	29803 MW-R14R	Total	Ground Water	EPA 5030B GCMS	
CUL0735-05	29805 Dup	Total	Ground Water	EPA 5030B GCMS	
CUL0735-06	29808 EB-1	Total	Ground Water	EPA 5030B GCMS	
CUL0735-07	29809 EB-2	Total	Ground Water	EPA 5030B GCMS	

WetChem

Analysis Batch: 11L0649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11L0649-BLK1	Method Blank	Total	Water - NonPotable	SW 9056	11L0649_P
11L0649-BS1	Lab Control Sample	Total	Water - NonPotable	SW 9056	11L0649_P
11L0649-MS1	29801 MW-10	Total	Water - NonPotable	SW 9056	11L0649_P
11L0649-MSD1	29801 MW-10	Total	Water - NonPotable	SW 9056	11L0649_P
CUL0735-01	29801 MW-10	Total	Ground Water	SW 9056	11L0649_P
CUL0735-02	29802 MW-R13	Total	Ground Water	SW 9056	11L0649_P
CUL0735-03	29803 MW-R14R	Total	Ground Water	SW 9056	11L0649_P

Prep Batch: 11L0649_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
11L0649-BLK1	Method Blank	Total	Water - NonPotable	NO PREP - WET CHEM	
11L0649-BS1	Lab Control Sample	Total	Water - NonPotable	NO PREP - WET CHEM	
11L0649-MS1	29801 MW-10	Total	Water - NonPotable	NO PREP - WET CHEM	
11L0649-MSD1	29801 MW-10	Total	Water - NonPotable	NO PREP - WET CHEM	
CUL0735-01	29801 MW-10	Total	Ground Water	NO PREP - WET CHEM	
CUL0735-02	29802 MW-R13	Total	Ground Water	NO PREP - WET CHEM	
CUL0735-03	29803 MW-R14R	Total	Ground Water	NO PREP - WET CHEM	

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29801 MW-10

Date Collected: 12/13/11 09:40

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-01

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		5.00	11L0813	12/16/11 18:58	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0763_P	12/16/11 15:57	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0763	12/19/11 11:28	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L2419_P	12/18/11 15:58	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11L2419	12/18/11 18:47	GMK	TAL IRV
Total	Analysis	SW 9056		5.00	11L0649	12/14/11 04:27	TLR	TAL CF
Total	Prep	NO PREP - WET CHEM		1.00	11L0649_P	12/14/11 04:27	TLR	TAL CF

Client Sample ID: 29802 MW-R13

Date Collected: 12/12/11 16:30

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-02

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		100	11L0813	12/16/11 19:23	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0763_P	12/16/11 15:57	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0763	12/19/11 11:28	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L3037_P	12/22/11 08:29	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		10	11L3037	12/22/11 12:32	GMK	TAL IRV
Total	Analysis	SW 9056		200	11L0649	12/14/11 04:27	TLR	TAL CF
Total	Prep	NO PREP - WET CHEM		1.00	11L0649_P	12/14/11 04:27	TLR	TAL CF

Client Sample ID: 29803 MW-R14R

Date Collected: 12/13/11 08:02

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-03

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11L0813	12/16/11 18:33	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0833_P	12/19/11 15:41	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0833	12/19/11 15:50	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L3037_P	12/22/11 08:29	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11L3037	12/22/11 16:32	GMK	TAL IRV
Total	Analysis	SW 9056		2.00	11L0649	12/14/11 04:27	TLR	TAL CF
Total	Prep	NO PREP - WET CHEM		1.00	11L0649_P	12/14/11 04:27	TLR	TAL CF

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: 29804 MW-34

Date Collected: 12/12/11 14:34

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-04

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11L0813	12/16/11 18:08	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0833_P	12/19/11 15:41	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0833	12/19/11 15:50	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L2419_P	12/18/11 15:58	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11L2419	12/18/11 21:12	GMK	TAL IRV

Client Sample ID: 29805 Dup

Date Collected: 12/13/11 08:02

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-05

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11L0813	12/16/11 21:29	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0833_P	12/19/11 15:41	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0833	12/19/11 15:50	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L3037_P	12/22/11 08:29	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11L3037	12/22/11 17:02	GMK	TAL IRV

Client Sample ID: 29808 EB-1

Date Collected: 12/12/11 17:20

Date Received: 12/13/11 13:24

Lab Sample ID: CUL0735-06

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11L0813	12/16/11 17:43	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0833_P	12/19/11 15:41	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0833	12/19/11 15:50	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L3037_P	12/22/11 08:29	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11L3037	12/22/11 14:02	GMK	TAL IRV

Client Sample ID: 29809 EB-2

Lab Sample ID: CUL0735-07

Matrix: Ground Water

Date Collected: 12/13/11 10:00

Date Received: 12/13/11 13:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11L0813	12/16/11 17:18	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0833_P	12/19/11 15:41	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0833	12/19/11 15:50	CMM	TAL CF
Total	Prep	EPA 5030B GCMS		1.0	11L3037_P	12/22/11 08:29	GMK	TAL IRV
Total	Analysis	EPA 8260B-SIM		1.0	11L3037	12/22/11 14:32	GMK	TAL IRV

Lab Chronicle

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Client Sample ID: Trip Blank

Lab Sample ID: CUL0735-08

Matrix: Water

Date Collected: 12/12/11 00:00
Date Received: 12/13/11 13:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total	Prep	SW 5030B		1.00	11L0813_P	12/16/11 00:00	SJN	TAL CF
Total	Analysis	SW 8260B		1.00	11L0813	12/16/11 16:53	SJN	TAL CF
Total	Prep	Default Prep VOC		1.00	11L0833_P	12/19/11 15:41	CMM	TAL CF
Total	Analysis	SW 9041		1.00	11L0833	12/19/11 15:50	CMM	TAL CF

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022

Definitions/Glossary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT

Project/Site: 10-500

TestAmerica Job ID: CUL0735

Qualifiers

GCMS Volatiles

Qualifier	Qualifier Description
L1	Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was outside control limits.
CIN	The % RSD for this compound was above 15%. The average % RSD for all compounds in the calibration met the 15% criteria specified in EPA methods 8260B/8270C.

GCMS-Volatiles

Qualifier	Qualifier Description
Z	Due to sample matrix effects, the surrogate recovery was below the acceptance limits.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Cedar Falls	AIHA - LAP	IHLAP		101044
TestAmerica Cedar Falls	Illinois	NELAC	5	200024
TestAmerica Cedar Falls	Iowa	State Program	7	7
TestAmerica Cedar Falls	Kansas	NELAC	7	E-10341
TestAmerica Cedar Falls	Minnesota	NELAC	5	019-999-319
TestAmerica Cedar Falls	North Dakota	State Program	8	R-186
TestAmerica Cedar Falls	Oregon	NELAC	10	IA100001
TestAmerica Cedar Falls	Wisconsin	State Program	5	999917270
TestAmerica Irvine	Arizona	State Program	9	AZ0671
TestAmerica Irvine	California	LA Cty Sanitation Districts	9	10256
TestAmerica Irvine	California	NELAC	9	1108CA
TestAmerica Irvine	California	State Program	9	2706
TestAmerica Irvine	Guam	State Program	9	Cert. No. 10.001r
TestAmerica Irvine	Hawaii	State Program	9	N/A
TestAmerica Irvine	Nevada	State Program	9	CA015312007A
TestAmerica Irvine	New Mexico	State Program	6	N/A
TestAmerica Irvine	Northern Mariana Islands	State Program	9	MP0002
TestAmerica Irvine	Oregon	NELAC	10	4005
TestAmerica Irvine	USDA	USDA		P330-09-00080

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method Summary

Client: FEHR-GRAHAM & ASSOCIATES - FREEPORT
Project/Site: 10-500

TestAmerica Job ID: CUL0735

Method	Method Description	Protocol	Laboratory
SW 8260B	Volatile Organic Compounds		TAL CF
SW 9041	VOC Preservation Check		TAL CF
EPA 8260B-SIM	1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)		TAL IRV
SW 9056	General Chemistry Parameters		TAL CF

Protocol References:

Laboratory References:

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL 800-750-2401

TAL IRV = TestAmerica Irvine, 17461 Derian Avenue, Suite 100, Irvine, CA 92614, TEL (949) 261-1022



THE LEADER IN ENVIRONMENTAL TESTING

Sauer Danfoss – Ames Iowa
TA Work Order #CUL0735

Case Narrative

TestAmerica – Cedar Falls received 7 samples on December 13, 2011 on ice. Requested analysis were for 8260 Volatiles, Sulfate, and 1,4-Dioxane by 8260 SIM.

Sample ID		Date	
Field	Lab ID	Collected	Received
29801 MW-10	CUL0735-01	12/13/11 0940	12/13/11
29802 MW-R13	CUL0735-02	12/13/11 1630	12/13/11
29803 MW-R14R	CUL0735-03	12/13/11 0802	12/13/11
29804 MW-34	CUL0735-04	12/13/11 1434	12/13/11
29805 DUP	CUL0735-05	12/13/11 0802	12/13/11
29808 EB-1	CUL0735-06	12/13/11 1720	12/13/11
29809 EB-2	CUL0735-07	12/13/11 1000	12/13/11
Trip Blank	CUL0735-08	12/13/11 0000	12/13/11

8260 Volatiles (Batch #11L0813)

Method Blank – No detections of target compounds.

Laboratory Control Sample (LCS) – Acetone was recovered above laboratory control limits. The samples had no detections above the reporting limit. Data not impacted.

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations
Sample surrogates – No deviations

Sample Dilutions – The following samples had dilutions performed due to target analyte concentration:
CUL0735-01 and CUL0735-02

Clarification of Data Qualifier:

CIN: The %RSD for the calibration of Vinyl Chloride (19.7%) used in result determination was above method specified %15.

8260 1,4-Dioxane (Batch#11L2419)

Method Blank – No deviations

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – CUL0735-01 exceeded laboratory control limits. The surrogate on the MS-MSD (Source CUL0735-01) was above laboratory control limits.

Sample Dilutions – No deviations

8260 1,4-Dioxane (Batch#11L3037)

Method Blank – No deviations

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – No deviations

Sample Dilutions – CUL0735-02 was diluted for non-target concentrations.

Sulfate (Batch #11L0649)

Method Blank – No deviations

Laboratory Control Sample (LCS) – No deviations

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) – No deviations

Sample surrogates – No deviations

Sample Dilutions – CUL0735-01, CUL0735-02, and CUL0735-03 were diluted for target concentrations.

There is no data quality issues associated with samples analyzed under this work order.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613

Phone 319-277-2401 or 800-750-2401
Fax 319-277-2425

To assist us in using the proper analytical methods,
is this work being conducted for regulatory purposes?
Compliance Monitoring

Client Name: Fehr-Graham & Associates Client #: _____

Address: 221 E Main St

City/State/Zip Code: Fresport, IL 61032

Project Manager: Jeff Ogden

Email Address: jogden@fehr-graham.com

Telephone Number: 815-235-7643 Fax: 815-235-4632

Sampler Name: (Print Name) Jason Miller

Sampler Signature: Jason Miller

Project Name: Sauer - Danfoss

Project #: 10-500

Site/Location ID: Ames State: IA

Report To: Amy Schneiderman

Invoice To: Amy Schneiderman

Quote #: _____ PO#: _____

TAT <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush (surcharges may apply)	Date Needed:	Fax Results: <input checked="" type="radio"/> Y <input type="radio"/> N	Email Results: <input checked="" type="radio"/> Y <input type="radio"/> N	SAMPLE ID	Date Sampled	Time Sampled	G = Grab; C = Composite S = Sludge F = Field Filtered	Matrix	Preservation & # of Containers				Analyze For:	QC Deliverables	REMARKS
									SI	WW	SW	Other			
29801 (mw-10)	12/13	9:40G		29801 (mw-10)				HNO3	6	6	X	X	X	X	
29802 (mw-k13)	12/13	4:30P		29802 (mw-k13)				NaOH			X	X	X	X	
29803 (mw-R14K)	12/13	8:02A		29803 (mw-R14K)				HCl			X	X	X	X	
29804 (mw-34)	12/12	2:39P		29804 (mw-34)							X	X	X	X	
29805 (D4P)	12/13	8:02A		29805 (D4P)							X	X	X	X	
29806 (matrix Spike)	12/13	9:40A		29806 (matrix Spike)							X	X	X	X	
29807 (matrix Spike b4)	12/13	9:40A		29807 (matrix Spike b4)							X	X	X	X	
29808 (EB-1)	12/12	5:20A		29808 (EB-1)							X	X	X	X	
29809 (EB-2)	12/13	10:00		29809 (EB-2)							X	X	X	X	

Special Instructions:

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Comments:
<u>Jason Miller</u>	12/13	1:24P	<u>Matt Edward</u>	12/13/14	1:24	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	

TAL-0033 (0706)

Page ____ of ____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

704 ENTERPRISE DRIVE • CEDAR FALLS, IA 50613
800-750-2401 • 319-277-2425 FAX

Sample Receipt and Temperature Log Form

Client: Fehr Graham + Associates

Project: Sauer - Danfoss

City: _____

Date: 12-13-11 Receiver's Initials: JME Time (Delivered): 1:24

Temperature Record:

Cooler ID# (If Applicable)

T-A-2

°C / On Ice

Thermometer:

- IR - 111531565 'D'
- IR - 111531506 'E'
- IR - 61854108 'Front'
- 101681126

Courier:

- UPS
- FedEx
- FedEx Ground
- US Postal Service
- Spee-Dee
- TA Courier
- TA Field Services
- Client
- Other

Temp Blank

Temperature out of compliance

Custody seals present?

Yes

Custody seals intact?

Yes No

Non-Conformance report started

Exceptions Noted

- Sample(s) not received in a cooler.
- Samples(s) received same day of sampling.
- Evidence of a chilling process
- No Temp. Blank. Inside temperature of cooler recorded.
- Temperature not taken:

*Refer to SOP CF-SS-01 for Temperature Criteria